CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, April 1, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(denotes that this work is advertised in Engineering News.)*

The following plans (P.) and Specifications (S.) are on file and may be seen at office of The Engineering News Publishing Co., 1 Broadway, New York.

Bids close.	Work.	See issue.
4- 3	Generating set, New Orleans, La. .....(S.)	3-18
4- 5	C.-I. pipe, Cheyenne, Wyo..(S.)	3-18
4- 6	*Pumping engine, Jackson, Miss. .....(S.)	3-11
4- 8	Pier, San Francisco, Cal. (P. & S.)	3-25
4-15	*Breakwater, Buffalo, N. Y..(S.)	3-25
4-17	Hospital, New York.....(S.)	3-18
4-17	Building, New York.....(S.)	4- 1
4-19	Pavement, Fulton, N. Y.....(S.)	3-25
4-19	*Lock gates, Nashville, Tenn.(S.)	3-18
4-20	*Sewers, Auburn, N. Y.....(S.)	3-25
4-21	*Sewer, mains, Birmingham, Ala. (P. & S.)	3-25
4-24	Roof (Buildings), New York..(S.)	4- 1
4-24	Hospital, Bremerton, Wash..(S.)	3-25
4-26	Buildings, North Chicago, Ill.(S.)	3-25
6- 1	*Pipe and specials, Philippines. .....(P. & S.)	3-25

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

4- 2	Transformers, Fort Riley, Kan..	3-18
4- 3	Generating set, New Orleans, La.	3-18
4- 5	Power plant, Manchester, Ga....	4- 1
4- 7	Conduit, Agnew, Cal.....	4- 1
4-10	Gas well, Medicine Hat, Alta....	4- 1
4-10	Power plant, Pine City, Minn....	3-25
4-13	*Conduit, Sioux City, Iowa.....	3-18
4-13	*Lighting, Portsmouth, Va.	3-11
4-14	Motor pit, tunnels, etc., New York	4- 1
4-15	Transformers, etc., Winnipeg, Man	3-11
4-15	Lamp standards, San Jose, Cal...	3-18
4-19	Wiring, Seattle, Wash.....	4- 1
4-23	*Conduit, etc., Newbern, N. C....	4- 1
4-24	*Light plant, Ft. D. A. Russell, Wyo.	4- 1
4-26	*Engines, generators, etc., Boston, Mass.....	4- 1
4-26	*Power plant, Wilkes-Barre, Pa..	3-25
5- 5	Steam mains, Danville, Ill.....	4- 1

BRIDGES.

4- 3	Bridge, Cleveland, Ohio.....	3-11
4- 3	Bridge, Camden, N. J.	3-25
4- 3	Bridge work, Chicago, Ill.....	4- 1
4- 3	Bridge, Shawville, Pa.....	4- 1
4- 5	Bridge, Holfesville, Miss.....	4- 1
4- 5	Bridge work, Harrisville, W. Va.	4- 1
4- 5	Bridge, Colfax, Wash.....	3-25
4- 5	Bridges, Marseilles, Ill.....	3-25
4- 5	Bridge, Isola, Miss.	3-25
4- 5	Bridge, Starke, Fla.....	3-25
4- 5	Bridge, etc., Harrisonburg, La..	2- 4
4- 5	Bridge, Watertown, Wis.....	3-18
4- 5	Bridges, Graham, N. C.....	3-18
4- 5	Culvert, Boston, Ohio.....	3-18
4- 6	Bridges, New Hampton, Iowa....	3-18
4- 6	Bridge, Laporte, Ind.....	3-18
4- 6	Bridge, etc., Ellijay, Ga.....	3-18
4- 6	Bridges, Washington C. H., Ohio.	3-11
4- 6	Bridges, etc., La Moure, N. Dak	3-25
4- 6	Bridge extension, King City, Cal.	4- 1
4- 6	Bridge work, Trenton, Mo.....	4- 1
4- 6	Bridges, Bryan, Ohio.....	4- 1
4- 6	Bridges, Washington, Va.....	4- 1
4- 7	Bridgework, Cleveland, Ohio.....	3-18
4- 8	Bridge, Winnipeg, Man.....	3-18
4- 8	Bridge, Dayton Ohio	3-25
4- 8	Bridge, Manhattan, Kan.	3- 4
4-10	Bridges, McAlester, Okla.	3-25
4-12	Bridge, Youngstown, Ohio.....	3-25
4-12	Bridge, Camden, N. J.....	3-25
4-12	Bridge, Sandpoint, Idaho.....	4- 1
4-12	Bridge, Los Angeles, Cal.....	4- 1
4-13	Bridge work, Elyria, Ohio.....	4- 1
4-14	Bridge, Slingerlands, N. Y.....	3-25
4-16	Bridges, etc., Logan, Ohio.....	4- 1
4-19	Bridge girder, Zanesville, Ohio...	4- 1
4-20	Bridges, Lincoln, Neb.....	4- 1
4-20	Substructures, etc., Marietta, O.	3-25
5- 4	Bridge, Savannah, Ga.....	3-25

BUILDINGS.

4- 3	*Assay bldg. foundation, New York.	3- 4
4- 5	Post-office, Dothan, Ala.....	3- 4
4- 5	Jail, Lebanon, Ind.	2-25
4- 5	Nurses' school, New York.....	3-25
4- 6	*Jail, Texarkana, Tex.....	3-25
4- 6	School, Cincinnati, Ohio.....	3-11
4- 7	Post-office, Marion, Ohio	3- 4
4- 7	Barracks, etc., Omaha, Neb.....	3-18
4-10	Hospital, Lethbridge, Alta.....	4- 1
4-10	Buildings, etc., Syracuse, N. Y..	4- 1
4-12	Hospital, Ft. Crook, Neb.....	4- 1
4-12	Assay office (superstr.), New York	3-11
4-12	Schools, New York.....	4- 1
4-13	Building materials, New York....	4- 1
4-14	Post-office, Pittsburg, Pa.....	3-18
4-15	*Post-office, Fayetteville, N. C....	3-18
4-16	Laundry (Mfg. Pl) Columbus, O.	4- 1
4-17	Building, New York.....	4- 1
4-17	Hospital, New York.....	3-18
4-19	Post-office, Sumter, S. C.....	3-18
4-20	*Post-office, Kearney, Neb.....	3-18
4-20	*Quarters, Ft. Morgan, Ala.....	3-25
4-20	Storehouses, Philadelphia, Pa....	4- 1
4-21	Post-office, Manistee, Mich.....	3-25
4-24	Hospital, Bremerton, Wash.....	3-25
4-26	Buildings, North Chicago, Ill....	3-11
4-22	Schools, Canton, Ohio.....	4- 1
4-22	Post-office, Willimantic, Conn....	3-25
4-24	Roof, New York.....	4- 1
4-26	*Post-office, Barre, Vt.	3-25
4-28	*Post-office, Kewanee, Ill.....	4- 1
5- 1	*Post-office, Michigan City, Ind...	4- 1
5- 3	Post-office, Lake Charles, La....	4- 1

WATER-WORKS.

4- 2	Pumping system, Platteville, Wis.	3-18
4- 2	*Pumping system, Platteville, Wis	3-11
4- 2	Water pipe, Everett, Mass.....	4- 1
4- 2	Water extensions, La Crosse, Wis.	4- 1
4- 5	*Water extension, Lehigh, Okla..	4- 1
4- 5	Specials, Lyndhurst, N. J.....	4- 1
4- 5	Pipe, etc., Panama (U. S. Poss.)	4- 1
4- 5	Fire pumps, Jacksonville, Fla...	3-18
4- 5	Cast-iron pipe, Cheyenne, Wyo..	3-11
4- 5	*Water pipe, etc., Cheyenne, Wyo.	3-18
4- 5	Water-works, Salem, Ind.....	3-25
4- 6	Water-works, Canistota, S. Dak	3-25
4- 6	*Pumping engine, Jackson, Miss..	3-11
4- 6	*Aqueduct, New York.....	3-11
4- 6	*Pumping engine, Greenville, Tex.	3-18
4- 6	Water meters, etc., New Orleans, La	3-18
4- 6	Water pipe, etc., Jackson, Miss..	4- 1
4- 6	Water pipe, Oakley, Ohio.....	4- 1
4- 6	Pipe, Woodbury, N. J.....	4- 1
4- 6	Water extension, Bayonne, N. J.	4- 1
4- 7	Water-works, Antonito, Colo....	4- 1
4- 7	Water-works, Weyburn, Sask....	3-11
4- 8	Pipe, Toledo, Ohio	3-18
4- 8	Aqueduct, New York.....	3-25
4- 9	Cast-iron pipe, Richland Center, Wis	3-18
4- 9	Reservoir, South Bend, Ind.....	4- 1
4-12	Well, Fort Crook, Neb.....	4- 1
4-13	Water mains, Saskatoon, Sask...	4- 1
4-15	Water system, Harlan, Mont....	4- 1
4-20	Water-works, Saint Henry, Ohio.	4- 1
4-20	*Water-pipe, McPherson, Kan....	3-25
4-21	*Cast-iron pipe, Rome, N. Y.....	4- 1
4-22	Water-works, Put-in-Bay, Ohio..	4- 1
4-27	*Brass goods, New Orleans, La...	4- 1
5- 5	Pumping machinery, Petaluma, Cal.	2-11
6- 1	*Pipe and specials, Philippines (U. S. Poss.)	3-25

SEWERS.

4- 2	*Purification plant, Millville, N. J.	2-25
4- 2	Sewer, Youngstown, Ohio.....	3-25
4- 2	Sewers, Youngstown, Ohio.....	4- 1
4- 3	Sewers, Silvis, Ill.....	4- 1
4- 3	*Sewer system, Julesburg, Colo...	3-25
4- 5	Sewers, Muskegon, Mich.....	3-25
4- 5	Sewer, Omaha, Neb.....	4- 1
4- 5	Sewer, Lawrence, Kan.....	4- 1
4- 5	Sewers, Yonkers, N. Y.....	4- 1
4- 5	Sewer, Oakmont, Pa.....	4- 1
4- 5	Sewer, Darby, Pa.....	4- 1
4- 6	Sewers, Dunmore, Pa.....	4- 1
4- 6	Drain, Trenton, N. J.....	4- 1
4- 6	Supplies (sewer), New York...	4- 1
4- 6	Sewer system, Ossining, N. Y....	3-25
4- 6	Sewer, Cedartown, Ga.....	3-18
4- 7	*Sewers, Baltimore, Md.....	3-18
4- 7	Sewers, Birmingham, Ala.....	3- 4
4- 7	Storm culvert, Butte, Mont.....	4- 1
4- 8	Sewer, Kearney, N. J.....	4- 1
4- 9	*Disposal plant, Oxford, Ohio.....	4- 1
4- 9	Sewers, Seattle, Wash.	3-25
4-12	Disposal plant, College Hill, Ohio	3-25
4-12	Sewers, New York.....	4- 1
4-12	*Sewer pipe, Ridgway, Pa.....	4- 1
4-13	Diverting conduit, Sioux City, Iowa	3-25
4-13	Sewerage system, Saskatoon, Sask.	4- 1
4-15	Sewer, La Crosse, Wis.....	4- 1
4-15	Sewers, Carlstadt, N. J.....	4- 1
4-15	Disposal plant, Circleville, Ohio.	3-25
4-15	*Sewers, McAlester, Okla.	3-25
4-17	Sewers, Oshkosh, Wis.....	3-25
4-20	*Sewers, Auburn, N. Y.....	3-25
4-21	*Sewer mains, Birmingham, Ala.	3-25
4-21	Sewer pipe drain, Columbus, O..	4- 1
4-26	Sewers, Washington, D. C.....	4- 1

STREETS AND ROADS.

4- 2	Paving, Little Falls, N. Y.....	3-18
4- 2	Repaving, Youngstown, Ohio.....	4- 1
4- 5	Sidewalks, Fargo, N. Dak.....	4- 1
4- 5	Sidewalks, Condo, N. Dak.....	4- 1
4- 5	Sidewalks, etc., Ellendale, N. Dak.	4- 1
4- 5	Roads, Danville, Ind.....	4- 1
4- 5	Asphalt, River Forrest, Ill.....	4- 1
4- 5	Sidewalks, Des Moines, Iowa.....	4- 1
4- 5	Paving, Montgomery, Ala.....	4- 1
4- 5	Grading, etc., Boston, Mass.....	4- 1
4- 5	Grading, etc., Bowling Green, Ohio	3-18
4- 5	Grading, Lafayette, Ala.....	3-18
4- 5	*Paving, Newburgh, N. Y.	3-18
4- 5	*Macadam, etc., Graham, N. C....	3-11
4- 5	Roads, Danville, Ind.....	3-11
4- 5	Grading, etc., Berea, Ohio.....	3-11
4- 5	*Paving, Frederick, Md.	3-18
4- 5	Road, Hartford City, Ind.....	3-25
4- 5	Road, Columbus, Ind.....	3-25
4- 5	Road, Logansport, Ind.....	3-25
4- 5	Road, Crown Point, Ind.....	3-25
4- 5	Grading, etc., Lawrence, Kan....	3-25
4- 5	Paving, Olympia, Wash.....	3-25
4- 6	Roads, Fowler, Ind.....	3-25
4- 6	Roads, Winamac, Ind.....	3-25
4- 6	Roads, Petersburg, Ind.....	3-25
4- 6	Road, Crawfordsville, Ind.....	3-11
4- 6	Road, Vincennes, Ind.....	3-11
4- 6	Paving, etc., New York	3-25
4- 6	Road, Washington, Ind.....	4- 1
4- 6	Road roller, Virginia, Minn.....	4- 1
4- 6	Roads, Covington, Ind.....	4- 1
4- 6	Sidewalks, etc., Struthers, Ohio..	4- 1
4- 6	Street impvts., Albany, N. Y....	4- 1
4- 7	Grading, etc., Baltimore, Md....	4- 1
4- 7	Street impvt., Columbus, Ohio...	4- 1
4- 7	Regulating, etc., Brooklyn, N. Y.	4- 1
4- 7	Road, Kokomo, Ind.....	3-18
4- 7	Roads, Muncie, Ind.....	3-25
4- 7	Grading, etc., Atlantic City, N. J	3-25
4- 7	Paving, Independence, Kan.....	3-25
4- 8	Road, Logansport, Ind.....	3-11
4- 8	Broken stone, New York.....	4- 1
4- 9	Road impvts., Napoleon, Ohio....	4- 1
4- 9	Roads, Noblesville, Ind.....	3-25
4- 9	Road repair, Toledo, Ohio.....	3-25
4-10	Grading, etc., Cleveland, Ohio...	3-25
4-10	Grading, Washington, D. C.....	4- 1
4-12	Road, Boydtown, Va.....	4- 1
4-12	Roads, Decatur, Ala.....	4- 1
4-12	Sidewalk, etc., New York.....	4- 1
4-12	*Macadam, Decatur, Ala.....	3-18
4-13	Macadam, Trenton, N. J.....	4- 1
4-14	Road, Freehold, N. J.....	4- 1
4-14	Paving, Shamokin, Pa.....	3-25
4-15	Pavement, Albert Lea, Minn.....	4- 1
4-15	Regulating, etc., Brooklyn N. Y.	4- 1
4-15	Road oil, Brooklyn, N. Y.....	4- 1
4-15	Grading, etc., Byesville, Ohio....	4- 1
4-16	Pavement, Tomah, Wis.....	3-25
4-17	Grading, etc., Cleveland, Ohio..	3-25
4-17	Paving, La Crosse, Wis.....	4- 1
4-19	Pavement, Fulton, N. Y.....	3-25
4-20	*Stone crushers, etc. Saskatoon, Sask.....	4- 1
5- 3	Road, Hartford City, Ind.....	4- 1

MISCELLANEOUS.

4- 1	Drainage ditch, Jeddo, Pa.....	4- 1
4- 2	Light vessel, Wash., D. C.	3- 4
4- 3	Walls, gates, Knoxville, Tenn.	3-11
4- 3	*Mine shaft, Jeddo, Pa.....	3-25
4- 3	'Phone line, Grey, Sask.....	4- 1
4- 3	Ditch, Crown Point, Ind.....	4- 1
4- 3	Levee, Kansas City, Kan.....	4- 1
4- 5	Galv. pipe, Greenville, Miss.....	4- 1
4- 5	'Phone system, Wilcox, Sask.....	4- 1
4- 5	Creek impvt., Prophetstown, Ill.	4- 1
4- 5	Culvert pipe, Mount Gilead, Ohio	3-25
4- 5	Pile driving, etc., Lawrence, Kan	3-25
4- 5	*Light-house, Wilmington, Del....	3-11
4- 5	*Dump scow, Providence, R. I....	3-18
4- 5	Garbage collect'n, Coraopolis, Pa.	3-25
4- 6	Retaining wall, New York	3-25
4- 6	Wharf, Beaumont, Tex.....	3-18
4- 6	*Grade crossings, Phila. & Reading (Rys.)	3-18
4- 7	*Light-house foundation, Wilmington, Del.	3-11
4- 8	Pier, San Francisco, Cal.	3-25
4- 8	Ditch, Harrisburg, Ill.....	4- 1
4-10	Ditch, Frankfort, Ind.....	4- 1
4-10	*Cement, Sacramento, Cal.....	4- 1
4-10	Buoy service, Mobile, Ala.....	3-18
4-12	*Lock gates, etc., Wash. D. C....	3-18
4-14	*Pier repair, Manistee, Mich.....	3-18
4-14	*Fence, Hull, Mass.....	3- 4
4-15	*Breakwater, Buffalo, N. Y.....	3-18
4-15	*Automatic anchors, Ft. Totten, N. Y	3-25
4-15	*Creek impvt., McAlester, Okla..	3-25
4-16	Cement, Brandon, Man	3-18
4-15	'Phone system, Belle Plaine, Sask.	4- 1
4-15	Pier shed, Elizabeth, N. J.....	4- 1
4-16	Mech. equipment, New York.....	4- 1
4-16	*Crematory (Garbage), West Point, N. Y.	4- 1
4-17	*Tile ditches, Atkinson, Ill.....	4- 1
4-17	Memorial, Gettysburg, Pa.....	3-25
4-17	*Lumber, Nashville, Tenn.....	3-18
4-19	*Lock gates, Nashville, Tenn.....	3-18
4-19	*Wire fence, Fort Meade, S. Dak.	3-25
4-20	Dam, Sault Ste. Marie, Mich..	4- 1
4-23	*Removing wreck, New York.....	3-25
4-23	*Lock, Cincinnati, Ohio	3-25
4-26	*Pass, Wheeling, W. Va.....	4- 1
4-22	*Hose, packing, Panama (U. S. Poss.)	4- 1
5- 1	*Road machinery, Hawaii (U. S. Poss.)	3-25
5- 3	*Concrete wall, Charleston, S. C..	4- 1
5-14	*Cement, Hawaii (U. S. Poss.)....	4- 1
5-22	Dry dock, Hawaii (U. S. Poss.).	3-25
5-26	*Lock, Vicksburg, Miss.....	4- 1

EXAMINATIONS.

4- 7	Aid, Wash., D. C.....	3-25
4- 7	Asst. geologist, Wash., D. C.....	3-25
4-14	Mech. Dftsman, Panama.....	3-25
4-14	Top. Dftsman, Panama.....	3-25
4-21	Tracer, Panama	3-25
4-21	Asst. Elec. Engr., Wash. D. C..	3-25
4-21	Asst. Chemist, Wash., D. C.	3-25
4-21	Asst. Physicist, Wash., D. C....	3-25
4-21	Asst. Photographer, Wash., D. C.	3-25

FOREIGN.

4-15	Steel rails, Siam	2-25
4-15	*Motor hose wagon, China.....	2-25
4-24	Railway supplies, Chile	2-25

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ALBERTA & GREAT WATERWAYS.—W. R. & D. O. Clark, bankers, of Kansas City, Mo., who hold the charter for this company's bonds, which are guaranteed by the Alberta government at $20,000 for 350 miles, state construction will be commenced this spring. J. A. L. WADDELL, of Kansas City, has already been awarded the contract for building the necessary bridges and trestles, as noted last week. The Alberta government has guaranteed the bonds of the Alberta & Great Waterways Ry. to the extent of $400,000 for terminals at Fort McMurray.

ARANSAS PASS, SAN ANTONIO & GREAT NORTHERN.—A company under this title proposes to build a main line of 350 miles, with a branch from Brady to Eden, Tex., about 50 miles. Col. J. H. Ransome, of San Angelo, Tex., and others, are interested.

ATCHISON, TOPEKA & SANTA FE.—It is stated that authorization has been given for the double-tracking of the line between Wyaconda, Mo., and Bucklin, 69 miles. Company may also complete this year about 50 miles of double-track on the Illinois and Missouri divisions.

BEIRNE & CLEAR LAKE.—This company has been chartered with $8,000 capital to build a line four miles long in Clark County, Arkansas. The directors are L. M. Rideispeyer, J. S. Boger, J. C. Greene, John A. Miller and J. J. Hawkins, of Beirne, Ark.

BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN & MANITOBA.—See St. Mary's & Crawford Bay.

BUFFALO, ROCHESTER & EASTERN.—The New York Public Service Commission, Second District, has refused to issue a certificate of necessity to this company, organized in 1907, to build from Buffalo, N. Y., east to Rochester, and thence to Troy, 300 miles. Previously noted.

CAIRO & NORFOLK.—Construction probably will be resumed in April or May at the Mississippi River end of this railway. It is hoped to have the first two sections (a total of about 60 miles) completed in October or November, and the third section to Hopkinsville, Ky., by January, 1910. L. W. Goode, 111 Broadway, New York, is Pres.

CANADIAN NORTHERN.—Company is applying for 7,500 acres of land and $3,000 per mile from the Ontario Government for the construction of a line to run from Port Arthur to Sellwood, Ont., a distance of approximately 530 miles.

The Manitoba Government has passed legislation to guarantee the bonds of this company to the extent of $13,000 per mile for the following lines: From a point on the line at or near Hallboro westerly or northwesterly for 110 miles; from a point near Oak Point northerly for 50 miles; from a point near Makinak northerly and northwesterly for 50 miles. M. H. MacLeod is Gen. Mgr., Winnipeg.

CANADIAN PACIFIC.—JOHN DUTTON, Winnipeg, has been awarded the contract for 20 miles westward from Weyburn on the Weyburn-Lethbridge "air-line." FOLEY, WELCH & STEWART, Winnipeg, have the contract for 20 mile section eastward from Lethbridge, the 25-mile branch from Stettler, and for 25 miles from Lacombe.

CHEMICAL & HELVETIA.—Company has been chartered to operate in Upshur and Randolph Counties, West Virginia. Capital, $25,000. Incorporators are H. G. Young, of Charleston, W. Va.; J. M. N. Downes and Eugene Brown, of Buckhannon, W. Va.; P. H. Schaffner, of Falls Creek, Pa.; William McDode, of Selbyville, W. Va., and Charles Mudge, of Olean, N. Y. The line will run from near the chemical station on the Baltimore & Ohio Railroad to Helvetia, W. Va. Headquarters will be at Selbyville.

CHICAGO, MILWAUKEE & PUGET SOUND.—This company has sold to the Union Pacific Co., a half interest in its line from Black River Junction, Wash., to a crossing of the Puyallup River, three miles from Tacoma, a distance of about 26 miles. The companies will jointly build a line about 100 miles long from a point near Tacoma to Gray's Harbor on the Pacific.

Contract has been awarded to J. M. BRUCE & CO., Seattle, Wash., for building the Milwaukee Terminal Co.'s Front St. line in Tacoma. The terminal company is a subsidiary of the Chicago, Milwaukee & Puget Sound Railway Co. and is to extend from the Tacoma Mill Co.'s mill, north along the Tacoma water-front to the North End Lumber Co.'s mill. Estimated cost, $250,000.

CLINTON & OKLAHOMA WESTERN.—FRANK L. ADAMS & CO., of Oklahoma City, Okla., have been awarded a 20-mile grading contract, connecting Clinton and Butler, Okla. Guy V. McClure, of Oklahoma City, is Ch. Engr. Line was chartered to build from a point at or near Lehigh, Okla., to Trinidad, Colo. The directors are C. C. Godman, Pres.; T. J. Nance, Vice-Pres.; C. H. Lamb, Secy.; C. R. Strong, Gen. Mgr., all of Clinton, Okla.

CUMBERLAND & NORTHWESTERN.—This company has been incorporated in Kentucky to build 75 miles of line through coal and timber lands from Artemus to Beattyville, Ky. The incorporators include S. P. Condon, F. S. Mead, E. L. Thomas and J. M. Graham, of Knoxville, Tenn.; B. C. Milner, of Louisville, Ky.; C. B. Lyttle and W. O. Giester, of Manchester, Ky. Mr. Graham is Pres., Mr. Condon, Vice-Pres. and Mr. Thomas, Secy. The company is authorized to issue securities to the amount of $3,000,000, the capital being $100,000.

DAYTON, LEBANON & CINCINNATI.—J. C. CARLAND & CO., of Toledo, Ohio, it is announced, have been awarded the contract for the grading and track-laying of the D., L. & C. into Dayton. This is a new road designed to connect Dayton and Cincinnati, and is backed by a syndicate headed by M. L. Sternberger, of Jackson, Ohio. All the work is to be finished by September 1, this year, and immediately after that date through train service, both passenger and freight, will be established between the two terminals. The KEYSTONE BRIDGE CO., of Wheeling, W. Va., has contract for bridges.

ELKHORN NORTHERN.—James Carse, Elkhorn, Man., is applying for the incorporation of this company with power to build from the Montana boundary near Elkhorn, Man., in a northern direction to the northern boundary of the province. The route is not definitely stated in the application for incorporation.

GRAND TRUNK PACIFIC.—Abraham E. Smith, U. S. Consul at Victoria, B. C., reports that the purchasing agent for the Grand Trunk Pacific Railway has advertised for bids for the supply of 300,000 cross and switch railroad ties, and 4,000 telegraph poles, for use on the first hundred miles of the extreme western section of this transcontinental line, between Prince Rupert and Kitsalas canyons, on the Skeena River, in British Columbia. Delivery of the ties and poles must all be made during the present summer, along line of railway, and bids should be sent at once to C. A. McNicholl, purchasing agent, Grand Trunk Pacific Railway, Vancouver, B. C.

LA FAYETTE R. R.—Surveys have been made for a line to connect La Fayette, Ga., with the Chattanooga Southern, about four miles. The company is stated to be in the market for quotations on a 50,000-gal. water tank, complete with spout; an upright boiler and pump; 375 tons of 60-lb. rails and 90 tons of 56-lb. rails, with angle bars, bolts and spikes, and a 200 or 300 light electric plant complete. J. A. Kauffman is Gen. Mgr., La Fayette, Ga. Noted on March 11.

NORFOLK & WESTERN.—Company has awarded contracts for the construction of ten miles of double track in West Virginia and Ohio, divided as follows: JOHN T. KINNEY, Lynchburg, three miles; MOORMAN BROS., four miles; J. C. KELLEY CONSTRUCTION CO., three miles. A balance of 20 miles, which will complete the projected 30 miles of double track, will be done by the Norfolk & Western forces. Work is to begin at once. Noted on March 25.

The directors of this company recently authorized the construction of seven miles of double track in West Virginia west of Iaeger, and 31 miles between the Ohio River and Columbus, Ohio, at congested points. This work, which is to be begun at once, will include considerable revision of lines and grades. The cost of the improvements will be about $1,225,000.

PENNSYLVANIA.—We are officially advised that the W. P. Zartman Lumber Co., of Shamokin, Pa., which recently bought Clarks Valley will build 25 miles of railroad, to get the timber. The surveys have been completed and construction of the road is now in progress, four miles having been completed. The line will have a maximum grade of 4%. W. P. Zartman, Gen. Mgr.; W. J. Daniel, Engr., Elizabethville, Pa.

ROCKPORT & ARANSAS PASS.—Company has been chartered to build a line from Rockport, Tex., to the jetties at Aransas Pass, 11½ miles. C. G. Johnson is Pres.; Harry Traylor, Secy.; D. R. Scrivener, Treas.; John H. Traylor is Vice-Pres. and Gen. Mgr., and Fred. Percival is Engr., all of Rockport, Tex.

ST. MARYS & KINGSLAND.—An extension will be built from Kingsland northwest to Waycross, Ga., about 50 miles, and thence west about 70 miles to a point on the Georgia Southern & Florida Railway at or near Sparks or Adel, Ga. The line is now eleven miles long and connects St. Marys and Kingsland. L. Johnson is Pres. and Gen. Mgr., St. Marys. Noted on Dec. 17.

WESTERN OF GEORGIA.—This company will apply for a charter to build either a steam or electric line about 60 miles long from a point on the Atlanta, Birmingham & Atlantic Railway at or near Aberdeen, in Fayette County, Georgia, west via Newnan, in Coweta County, and Franklin, in Heard County, and thence to the Alabama boundary. Capital, $500,000. The incorporators are John W. Daniel, Hope H. Lane, Ben. H. Tompkins, R. B. Mooty, R. M. Lipford, J. W. Ray, Robert G. Crain, James R. Daniel, W. D. Taylor, W. T. Goodson and others, of Franklin.

WHEELING & UNIONTOWN.—The Wheeling & Uniontown Railroad Co., of Wheeling, W. Va., has been chartered to build a line from Wheeling to Uniontown, Pa. Capital, $10,000. The incorporators are S. M. Noyes, J. M. Ritz, A. B. Woodruff, Randolph Hix and L. C. Ebeling, all of Wheeling.

ELECTRIC RAILWAYS.

BUFFALO, N. Y.—The Public Service Commission, Second District, has given its approval of a lease by which the Buffalo & Lackawanna Traction Co. leases all its corporate property, franchise and privileges to the Buffalo & Lake Erie Traction Co. for a term of 999 years.

LAKEWOOD, N. J.—Application has been made to the Secretary of State, at Trenton, for a charter to build and operate a trolley road from Lakewood to Point Pleasant, a distance of about nine miles. The applicants include Freeholder Charles R. Le Compte, James H. Butcher, of Lakewood; former Assemblyman R. A. Clark, Joseph W. Johnson, A. O. S. Havens, William K. Blodgett, of Point Pleasant, and others. They plan to take over the right-of-way of the Trenton, Lakewood & Atlanta Ry. Co., which is now in the hands of a receiver.

CAMDEN, N. J.—The City Council on April 8 will consider matter of granting a franchise to the Camden & Delaware Tunnel R. R. Co. The City Council on March 10 adopted several amendments which forbid the sale or lease of the franchise without the consent of the city and imposed a tax of $1 per lin. ft. for tracks for 25 years. At the expiration of that time the sum is to be increased to the satisfaction of the City Council or other governing body. Noted on Feb. 18.

JOHNSTOWN, PA.—Geo. U. G. Holman, Gen. Mgr. and Design. Engr. of the Johnstown & Gallitzin Ry. Co., Suppes Bldg., Johnstown, informs us that construction contracts will be awarded about May 1. The railway will be about 37½ miles in length and will connect Johnstown and Gallitzin. Surveys are made, capital obtained and nearly all right-of-way secured. Noted on Feb. 11.

LEBANON, PA.—Contracts have not yet been awarded by the Lebanon & Southern St. Ry. Co. for building its proposed line, 20 miles in length, from Lebanon to Buffalo, Schaefferstown, Klinefeltersville, Newmanstown and Womelsdorf. It is the intention of the promoters to begin construction work as soon as the sum of $150,000 is subscribed. The company has not yet been incorporated. Capital stock, $300,000. Officers: J. M. Shenk is Pres.; Wm. P. Coldren, Vice-Pres.; Charles Coldren, Secy.; Frank Houck, Treas., all of Lebanon. Officially noted on Jan. 21.

BEAVERDALE, PA.—We are officially advised that date for letting construction contracts will not be decided by the Mount Carmel & Locust Gap Transit Co. until after right-of-way is obtained. The line will be 2 miles long, running from Beaversdale to Locust Gap. Surveys are made and capital secured. Right-of-way has not been obtained yet. E. W. Samuel is Pres., Mt. Carmel, Pa. Charter was recently granted to this company. Capital, $30,000. E. W. Samuels is Pres., Mt. Carmel; F. W. Y. Lorenz is Ch. Engr., Shamokin, Pa. Previously noted.

CAMBRIDGE, MD.—The Mcoay Engineering Co., 9 East Lexington St., Baltimore, Md., is running preliminary survey for an electric railway to be constructed from Cambridge, Md. to Seaford, Del., and from Salisbury, Md., to Claiborne, Md. John H. Burgess, Jr., of Cambridge, Md., and T. Hughlett Henry of Easton, Md., are interested. Clarence Morfit is Engr.-in-Charge.

ELIZABETH CITY, N. C.—We are officially advised that the Elizabeth City & Albemarle Elec. Ry. Co. will be organized soon, when contracts probably will be let for building this line from Elizabeth City to Albemarle Sound, 14 miles. Right-of-way is secured. D. G. Wilson, Weeksville, N. C., is interested.

SPARTANBURG, S. C.—The Spartanburg Ry., Gas & Elec. Co. announces that the extension to Saxon Mills will be built within a year; also that the company intends to extend to Drayton Mills, Whitney Mills and Cowpens. F. H. Knox is Vice-Pres. and Gen. Mgr.

GRIFFIN, GA.—The Middle Georgia Interurban Ry. Co. has been granted a charter to build an electric railway, 70 miles in length, between Griffin and Social Circle, with branches to Flovilla and Monticello. Capital stock, $200,000. Incorporators: Charles F. Howe, Milledgeville; L. W. Roberts, Atlanta, and W. F. Smith, Flovilla.

COLUMBUS, OHIO.—John G. Webb and financial associates, who own the Columbus, Delaware & Marion Ry. Co., will join in the building of an electric line, it is stated, connecting Marion with either Findlay or Fostoria, by way of Upper Sandusky, which, with the existing lines controlled by them, will give a continuous line connecting Columbus with Toledo. H. L. Weber, Marion, Ohio, is Ch. Engr.

NEWCASTLE, IND.—W. L. David and L. S. Nichols, of Findlay, Ohio, have made application to the City Council of Newcastle, for a franchise to extend over a period of 50 years which will enable them to build an interurban line, connecting the cities of Muncie and Newcastle, a distance of about 25 miles.

FORT WAYNE, IND.—The Fort Wayne & Toledo Elec. Ry. Co. plans to begin construction about May 1 on its projected electric railway, which will be about 55 miles in length, and will connect Fort Wayne, Maysville, Ind., Hicksville, Farmer, Bryan and Montpelier, Ohio. R. T. Bastress, Harlan, Ind., is Gen. Mgr.

VINCENNES, IND.—The Vincennes, West Baden & Louisville Traction Co., which proposes to build an electric railway from Vincennes to Jasper via Petersburg, has been voted a subsidy of $50,000 by Vincennes Township. A. M. Yelton, Vincennes, is Secy.

FARMINGTON, ILL.—The Peoria & Galesburg Electric Ry. Co. has applied to the City Council for 50-year franchise to build and operate an electric railway over certain streets of Farmington.

SPRINGFIELD, ILL.—The Illinois Inland Elec. Ry. Co. has been chartered to build an interurban line from Springfield in a southeasterly direction through Sangamon and Christian Counties, to Pana. The principal office is Springfield. Capital stock, $50,000. The incorporators and first Board of Directors are George W. Davidson, Carl O. Beroth, T. C. Kennedy, A. E. Wolf and William Baker, all of Chicago. A special meeting of the stockholders of this company, which proposes to build an electric railway to Springfield through Taylorville, Pana and Shelbyville, to Decatur, will be held May 15, in Springfield, for the purpose of voting on a proposition to increase the capital stock from $50,000 to $2,500,000.

DAVENPORT, IOWA.—The Tri-City Ry. Co. will let contracts soon for building about eight miles of new track. Jos. F. Porter is Pres., Davenport. J. G. White & Co., Inc., New York, are the operating managers.

MISSOULA, MONT.—We are officially advised that the Missoula St. Ry. Co. has secured capital and right-of-way for its proposed 2-mile line within city limits. Survey has not been made and date for letting contracts is uncertain. J. R. Wharton, Butte, Mont., is Pres. Noted on Feb. 4 and March 11.

WHITEWOOD, S. DAK.—The Dakota Western Ry. Co. is reported incorporated in South Dakota to build a 30-mile electric railway from Whitewood. The incorporators are H. E. Cooper, P. W. Benniwell, T. W. Thompson, Whitewood, and Saml. R. Cleaver and Fred A. Robinson, of Empire.

BEAUMONT, TEX.—The Commissioners of Jefferson County have granted a franchise to H. J. Myers and S. A. Price, of Dayton, Ohio, who have been granted a franchise for building a street railway system in Port Arthur.

REDMOND, ORE.—The Crook County Water, Light & Power Co. has been incorporated in Oregon to build an electric railway from Redmond to Prineville; also to build and operate power plants. Capital stock, $50,000. J. H. Jackson, Redmond, is Pres.

SPOKANE, WASH.—The Spokane & Columbia Western Ry. Co., we are officially advised, proposes to build from Spokane to mouth of the Spokane River, via Davenport, a distance of 75 miles. Surveys are made and right-of-way partly secured. Company is not ready to announce details yet. Clyde M. Graves is Pres., and Alex. M. Lupfer is Ch. Engr., Spokane. Mr. Graves and Mr. Lupfer are Gen. Mgr. and Ch. Engr., respectively, of the Spokane & Inland Empire R. R. Co.

SAN FRANCISCO, CAL.—Frank D. Stringham, representing the firm of Hillyer, Stringham & O'Brien, informs us that the application for a franchise is still under consideration by committee of the Board of Supervisors for a street railway system to begin at Stockton and Market Sts., and out Stockton St. to Sutter St., through a tunnel of four blocks from Sutter St. to Sacramento St., then to the surface again to the Bay.

CRESTON, B. C.—The Goat River Power & Light Co. has received a charter to build an electric car line from here to Erickson and Pork Hills, a distance of ten miles.

NELSON, B. C.—The city has decided to purchase and operate the system of the Nelson Electric Tramway Co., which has been lying idle since the fire in May last, which destroyed all the company's equipment.

LIGHT AND POWER PLANTS.

*(*denotes that this work is advertised in Engineering News.)*

*BOSTON, MASS.—Bids are asked by Lt.-Col. Edward Burr, Corps Engrs., U. S. A., at the U. S. Engineer Office, Boston, Mass., until noon, April 26, for boilers, engines, generators, electrical cable and switchboards.

NEW YORK, N. Y.—The Trustees of the Public Library have obtained permission from the Board of Estimate to install an electric light plant of their own in the new building at 42d St. and Fifth Ave. An appropriation of $102,000 was made by the Board with the proviso that if the plant costs any more than that sum the Trustees will pay the difference, and that the city shall not be called upon to maintain the plant.

NEW YORK, N. Y.—Bids were received as follows on March 27 at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing additional machinery for power plant at the New York Navy Yard. The machinery is to consist of one surface condenser, one motor-driven circulating pump, one steam-driven dry-vacuum pump, one motor-driven centrifugal hot-well pump, motor panel boards and electrical connections, complete piping and connections for the installation of the above. G. & W. Mfg. Co., 26 Cortlandt St., New York, $15,900, $16,600; E. Rutzler Co., 127 White St., New York, $12,366; D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, $11,950; Evans, Almirall & Co., 281 Water St., New York, $11,960, $11,800; Walworth Mfg. Co., 132 Federal St., Boston, Mass., $11,778, $10,998, $10,923, $10,115.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 14, by Bird S. Coler, Pres. Boro. of Brooklyn, for furnishing all the labor and material required for constructing motor pit, shaft tunnel and drainage structures and appurtenances complete for the power plant for Gowanus Flushing tunnel, at the head of Gowanus Canal, Boro. of Brooklyn.

Bids were received as follows on March 29 by C. B. J. Snyder, Supt. School Bldgs., Dept of Education, for installing electric equipment in new Public School No. 162, on the northerly side of St. Nicholas Ave., between Willoughby Ave. and Suydem St., Borough of Brooklyn: E. J. Duggan, 1133 Broadway, New York, $8,440; Cowdon & De Young, Inc., $8,297; Griffin & Co., $9,459; E. F. Jackson, Inc., $9,085; Commercial Construction Co., $8,921; Pete & Powers, $9,875.

CENTRAL ISLIP, N. Y.—The bids received by the Commission in Lunacy on March 24 for engine, generator and switchboard at the Central Islip State Hospital were: John Kelly, Schenectady, N. Y., $8,139; W. M. Sheehan & Co., New York, $6,296; Commercial Construction Co., New York, $5,923; New York Construction Co., New York, $6,511; Hewitt & Marden, Newburgh, N. Y., $7,200; Griscom-Spencer Co., New York, $8,349; Westinghouse Electric Mfg. Co., New York, $9,660; The G. & W. Mfg. Co., 26 Cortlandt St., New York, $7,743; Erie City Iron Works, New York, $7,590.

The bids received by the commission on the same day for two horizontal tubular boilers at the Central Islip State Hospital, were: P. Delany & Co., Newburgh, N. Y., $3,595; Erie City Iron Works, New York, $3,540; the G. & W. Mfg. Co., 26 Cortlandt St., New York, $4,423; W. M. Sheehan & Co., New York, $3,962; Commercial Construction Co., New York, $4,182; A. D. Granger Co., New York, $4,251; Griscom-Spencer Co., 90 West St., New York, $4,911; the R. T. Ford Co., Rochester, N. Y., $4,300; W. B. Armstrong, Albany, N. Y., $4,429; James H. Merritt & Co., New York, $6,498; Edwin Burhorn, New York, $4,405. See item under Buildings.

ALBANY, N. Y.—The Trustees of Public Buildings, Governor Charles E. Hughes, Chn., have approved a bill making an appropriation of $45,000 for the construction of a new boiler-house to furnish light and heat to the Capitol and new Educational Building. The appropriation in all probability will be passed by the present Legislature.

The Oswego County Light & Power Co. has applied to the Public Service Commission, Second District, for permission to increase its capital stock [illegible] $1,000,000 to $1,100,000 and to issue [illegible] 000 in bonds. The company proposes to [illegible] elop the water power at Salmon River F[illegible] and construct a power plant and erect tr[illegible] mission lines to supply electricity for lamp[illegible] motors and heat in Syracuse, Watertown, [illegible] go, Rome and Oneida, and probably for [illegible] urban railways leading out of Syracuse. [illegible] estimated that 15,000 HP. can be devel[illegible] at a cost of about $3,100,000. The pl[illegible] complete will cost about $4,000,000.

KINGS PARK, N. Y.—The [illegible] bids received on March 24 by the State Com[illegible] sion in Lunacy for construction of power-h[illegible], coal pocket and trestle, at the Kings [illegible] rk State Hospital, were: (1) To const[illegible] power-house; (2) add for constructing co[illegible] pocket, including foundations for trestle, [illegible] not including trestle and roof; (3) add [illegible] constructing trestle and roof; (4) add [illegible] constructing conduits, including electric [illegible] er cables between laundry and power-h[illegible]: H. Wales Lines Co., Meriden, Conn., [illegible] $34,323, (2) $12,500, (3) $7,200, (4) $45,[illegible] Morris Kantrowitz, Albany, N. Y., [illegible] $35,509, (2) $11,500, (3) $6,900, (4) $36,6[illegible] Peter Keeler Building Co., Albany, N. Y., [illegible] $29,950, (2) $10,250, (3) $6,140, (4) $28,[illegible] Charles H. Peckworth, New York, (1) $[illegible]24, (2) $17,572, (3) $5,246 (4) $28,651; [illegible] E. O'Connor, Brooklyn, N. Y., (1) $41,850, [illegible] $19,743, (3) $7,652, (4) $44,183; Penn Bridge Co., New Brighton, Pa., (1) $37,560, [illegible] $16,365, (3) $9,320 (4) $20,484; Richard K. Heningham, New York, (1) $36,585, (2) $14,245, (3) $6,953, (4) $30,630; James MacArthur, Brooklyn, N. Y., (1) $40,809, (2) $18,723 (3) $6,481, (4) $31,420; William Crawford, New York, (1) $44,978, (2) $25,174, (4) $45,882; Bliss & Griffiths, New York, (1) $35,631, (2) $12,969, (3) $6,964, (4 $22,135; Merrill-Ruckgaber Co., New York, (1) $28,700, (2) $10,490, (3) $7,416, (4) $27,867; Ross-Busch Co., New York, (1) $31,126, (2) $8,219, (3) $6,052, (4) $22,956; P. J. Carlin Construction Co., New York, (1) $39,695, (2) $23,900, (4) $32,800. See item under Manufacturing Plants.

POUGHKEEPSIE, N. Y.—The bids received by the Commission in Lunacy on March 24 for construction of power-house, coal pocket and trestle at the Hudson River State Hospital, at Poughkeepsie, N. Y., were: (1) To construct power-house; (2) add for coal pocket, including foundations for trestle, (3) add for trestle and roof; (4) add for constructing conduit: George Sykes, New York, (1) $33,300, (2) $8,600, (3) $5,970, (4) $2,970; Morris Kantrowitz, Albany, N. Y., (1) $39,700, (2) $14,000, (3) $7,400, (4) $2,800; Peter Keeler Bldg. Co., Albany, N. Y., (1) $31,200, (2) $8,150, (3) $6,490, (4) 2,060; Charles H. Peckworth, New York, (1) $43,743, (2) $19,150, (3) $5,599, (4) $2,992; W. A. L'Hommedieu & Co., New York, (1) $40,826, (2) $9,639, (3) $8,690, (4) $2,272; John Dyer, Jr., Albany, N. Y., (1) $33,075, (2) $10,260, (3) $6,650, (4) $2,176; George Hildebrand, New York, (1) $39,000, (2) $17,800, (3) $4,000, (4) $1,940; Kelly & Kelley, New York, (1) $35,553, (2) $7,630, (3) $7,860, (4) $1,600; Bliss & Griffiths, New York, (1) $37,530, (2) $8,430, (3) $6,447, (4) $2,085; R. T. Ford Co., Rochester, N. Y., (1) $34,400, (2) $9,500, (3) $6,800, (4) $2,000; R. Richards & Son, Utica, N. Y., (1) $34,930, (2) $9,165, (3) $5,335, (4) $2,635; James Stewart & Co., New York, (1) $40,500, (2) $11,100, (3) $8,850, (4) $2,550; William J. McCann, Albany, N. Y., (1) $32,932, (2) $9,660, (3) $5,268, (4) $2,000.

The bids received for construction of conduit to the acute hospital at the Hudson River State Hospital, Poughkeepsie, N. Y., were: R. T. Ford Co., Rochester, N. Y., $10,800; James Stewart & Co., New York, $16,275; William J. McCann, Albany, N. Y., $13,425; George Sykes, New York, $12,170; John Dyer, Jr., Albany, N. Y., $11,341; John W. Danforth Co., Buffalo, N. Y., $13,319; Frank Besch, Troy, N. Y., $12,929; Kelly & Kelley, Schenectady, N. Y., $11,131; Bliss & Griffiths, New York, $12,044; E. P. Bates, Syracuse, N. Y., $12,989; R. Richards & Son, Utica, N. Y., $12,400; Peter Keeler Bldg. Co., Albany, N. Y., $12,780; Morris Kantrowitz, Albany, N. Y., $12,850. T. E. McGarr is Secy. of Comn.; F. B. Ware is State Arch.

*NEWBERN, N. C.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 23, for the installation of a conduit and wiring system, and extension of the present gas-piping system, in the U. S. post-office, court-house and custom-house at Newbern.

MANCHESTER, GA.—Bids are asked by H. Francis Walker, Austell Bldg., Atlanta, Arch. and Engr., until April 5 for the proposed power plant, with a capacity of 1,000 HP., for the Manchester Cotton Mills at Manchester.

INDIANAPOLIS, IND.—See item under Buildings.

NORTH CHICAGO, ILL.—But one bid was received on March 24 at the Bureau of Navigation, Navy Department, Washington, D. C., for the installation of an outside lighting system at the Naval Training Station, Great Lakes, North Chicago, Ill.: D'Olier Engineering Co., Philadelphia, $4,638.

DANVILLE, ILL.—Bids are asked until 10 a. m., April 5, by M. J. Barger, Treas., Danville Branch, N. H. D. V. S., for repairing steam mains and return pipes at the N. H. D. V. S.

BURLINGTON, IOWA.—We are officially advised that bids were received by D. S. Cooper, Secy. Bd. of Education, Burlington, Iowa, on March 18, on material for a central heating station, including three 150-HP. water-tube boilers, set up complete; a complete underground distribution system to three schools; a power-house and a 54-in. x 125-ft. brick or tile chimney. The underground work has been let to PETERS-EICHLER HEATING CO., 1503 Chestnut St., St. Louis, Mo.; building and chimney to W. M. ALLEN, SONS & CO., Peoria, Ill.; boilers to MURRAY IRON WORKS CO., Burlington. William H. Bryan, Lincoln Trust Bldg., St. Louis, is Consult. Engr. and Temple, Burrows & McLane, McManus Bldg., Davenport, Iowa, Associate Archs. Cost, $30,000.

BELLEVUE, IOWA.—The City Council has awarded contracts for additional equipment for the municipal electric light plant as follows: For generator, to the WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., and gas-producer engine, to the FOOS GAS ENGINE CO., of Springfield, Ohio. The improvements will involve an expenditure of $6,116, and, when completed, a 24-hour service will be established for both lamps and motors.

*FORT D. A. RUSSELL, WYO.—Bids are asked by Capt. V. K. Hart, Acting Q. M., Keefe Hall, Cheyenne, Wyo., until 9.30 a. m., April 28, for the construction and remodeling of an electric lighting system at Fort D. A. Russell, including the following items: (1) Constructing primary, secondary, service, transmission and street light lines, furnishing and installing cut-outs and street lamp brackets, and installing transformers, removing part and remodeling part of the old line; (2) furnishing and installing all tungsten lamps, switchboard and all apparatus for sub-station; (3) furnishing all watt meters and transformers; (4) installing interior conduit, wiring and arc lamps for electric lighting cavalry drill hall; (5) construction of a building for transformer sub-station.

TONKAWA, OKLA.—The following contracts have been awarded for the construction of a municipal electric light plant and extension of water-works system: For construction work, to LUND & CUNYON, for $15,483; electrical equipment, to the WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., for $4,040; engines, to the ENGLISH IRON WORKS, for $2,075; for street lamps, to the COLLIER-CLARK CONSTRUCTION CO., for $600; for pump, to the DEANE STEAM PUMP CO., for $1,460, and to the WESTERN VALVE CO., for hydrants and valves, $626. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

SEATTLE, WASH.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 19, for installation of an electric wiring system for the U. S. Government buildings at the Alaska-Yukon-Pacific Exposition, at Seattle.

AGNEW, CAL.—Bids are asked until 7 p. m., April 7, by the Board of Managers of Agnew's State Hospital, at 7 West Santa Clara St., San Jose, Cal., for furnishing, building and installing a complete conduit with heating and lighting systems. L. M. Simonson is Secy.

IBERVILLE, QUE.—The NORTHERN ELECTRIC & MFG. CO., LTD., has been awarded the contract for supplying and installing a Western Electric alternator, exciter and switchboard equipment for the town of Iberville, Que.

WINNIPEG, MAN.—The bid of the H. D. WILLIAMSON CONSTRUCTION CO., of Toronto, in connection with the construction of transmission lines between Point du Bois and Winnipeg has been accepted. It amounts to $118,424, which includes $83,424 for the steel, gravel and cement required for the tower. Other bids accepted were R. & D. McLEOD, $23,421, for a telephone line, and the STUART MACHINERY CO., $1,544, for repair shop equipment.

MEDICINE HAT, ALTA.—Bids will be received by W. P. Morrison, City Engr., until noon, April 10, for all materials, labor, etc., necessary for drilling a natural gas well here.

BRIDGES.

CURWENSVILLE, PA.—The FERRO CONCRETE CO., Harrisburg, Pa., has been awarded contracts for building three reinforced-concrete bridges over creeks a short distance from this place. Each will have one span.

SHAWVILLE, PA.—Bids are asked until 1 p. m., April 3, by the County Commissioners for the construction of a reinforced-concrete bridge over Lick Run, near here. It will be a single span structure with concrete wingwalls and approaches. Plans are on file in the office of the County Commissioners, Clearfield, Pa.

MONONGAHELA, PA.—The Fort Pitt Bridge Co., Canonsburg, Pa., which has the general contract for the construction of the proposed new bridge over the Monongahela River here has awarded the contract for the masonry and concrete piling to the DRAVO CONTRACTING CO., Lewis Block, Pittsburg.

BERWINSDALE, PA.—The contract for constructing the reinforced-concrete arch bridge of single spans over Witner Run has been awarded to the FERRO-CONCRETE CO., Harrisburg, Pa.

POTTSVILLE, PA.—Contract for the construction of a bridge across Schuylkill River at Palo Alto has been awarded by the County Commissioners to the NELSON-MEREDITH CO., of Chambersburg, Pa., at $5,497. Bids were opened on March 22.

PITTSBURG, PA.—Plans for the proposed new Point bridge across the Allegheny River to connect the North Side with the city proper call for the following: Approaches to begin at the beginning of the present approaches of the Point Bridge over to the South Side 250 ft. from the bank at flood stage; two 500-ft. spans each 76 ft. above pool level, and a concrete arch viaduct 1,000 ft. in length at the North Side end of the bridge. The superstructure will be of steel, and will be 54 ft. wide, with a 22-ft. roadway and two 11-ft. walks. Piers, shore and water, will be of reinforced concrete. Portions of Liberty Ave. and Water St., on the old city side, will be elevated and the street levels raised, and South and Allegheny Aves. and Rebecca St. on the North Side will also be raised. The plans were prepared by N. S. Sprague, Supt. of the Bureau of Construction. Bonds will be sold for the construction of this bridge, which will cost about $1,000,000, as soon as the ordinance passes Councils, and bids will then be asked. The bridge will be placed under way early in the coming summer.

NORFOLK, VA.—The Permanent Road Commission, composed of Alvah H. Martin, M. L. Long and George W. Brown, has decided to build a concrete bridge over Millcam Creek and Newton Quarter Creek, on Great Bridge Road.

WASHINGTON, VA.—Bids will be received until April 6 by P. St. J. Wilson, State Highway Comr., Richmond, for constructing two steel bridges in Rappahannock County, length of bridges to be 140 ft. and 80 ft., respectively.

HARRISVILLE, W. VA.—Bids are asked until noon, April 5, by the County for the stone work for a new bridge to be built across Bonds Creek at the mouth of Whiskey Run. Bids are to be by the perch, and to include all materials. W. R. Meservie is County Clk., Harrisville.

HARDEEVILLE, S. C.—The Atlantic Coast Line R. R. Co., E. B. Pleasants, Ch. Engr., Wilmington, N. C., has awarded contract to the GADSDEN CONTRACTING CO., Savannah, Ga., for the construction of a steel bridge across the Savannah River at Hardeeville.

HOLMESVILLE, MISS.—Bids will be received until April 5 by the Board of Supervisors, Magnolia, W. C. Vaught, Clk., for constructing a steel bridge across Bogue Chitto River at Holmesville, and also for a bridge across the Tangipahoa River.

NASHVILLE, TENN.—E. T. LEWIS & CO. were awarded contract on March 18 for macadamizing the approaches to the new Sparkman St. Bridge and to the Jefferson St. Bridge at $2.84. There were four other bids received.

BRYAN, OHIO.—Bids will be received until 11 a. m., April 6, by the County Commissioners for constructing eight steel bridges ranging in span from 150 ft. to 40 ft.; also for six small concrete bridges ranging in span from 12 to 25 ft. H. M. Sharp is County Engr.

LOGAN, OHIO.—Bids are asked until 1 p. m., April 16, by the County Commissioners for the construction of a concrete arch bridge, 115 ft. center to center of piers in length and 18-ft. roadway, on the Logan-Enterprise Road, near Lock 15 of the old Hocking Canal, in Falls Township; and for a steel superstructure for the same to be 150 ft. long and 18-ft. roadway, concrete plank and block floor, and for building concrete abutments or the steel superstructure. James L. Martin is County Audr.

ELYRIA, OHIO.—Bids are asked by the County Commissioners until 11 a. m., April 13, for bridge work. Charles Chandler is Clk.

ZANESVILLE, OHIO.—Bids will be received by the Commissioners of Muskingum County until noon, April 19, for the erection of the concrete girder of a highway bridge over Joe's Run on the Newark Road in Falls Township. Bridge to consist of one span 54 ft. in length with one roadway 18 ft. wide in the clear.

CHICAGO, ILL.—Bids will be received until 11 a. m., April 3 by John J. Hanberg, Comr. Pub. Wks., for furnishing material and moving and shifting present span at Lawrence Ave. over the north branch of the Chicago River, for constructing new supports for same, reconstructing bridge floor and building new timber approaches complete.

MINERVA, ILL.—Bids were received as follows by the city on March 15 for constructing the cement bridge across the river at State St.: W. M. Hauser, Chicago, $42,000; George R. Keechey, Madison, Wis., $43,897; William Cunney Construction Co., Joliet, $46,700; Brenner Electric Construction Co., Chicago, $75,350; P. Mueller, Chicago, $73,330; Schillinger Bros., Chicago, $37,356 and old bridge; Wheeler Construction Co., Geneva, $38,400 with provisions for deducting; Union Engineering Co., Chicago, $37,500; Newkirk, Powers Construction Co., Joliet, $41,500; Advance Construction Co., Waukesha, Wis., $36,800, wants old bridge; Illinois Bridge Co., Chicago, $26,770 to $28,785, on own plans.

CHARLES CITY, IOWA.—The Floyd County Board of Supervisors on March 20 let the contract for a street wide concrete bridge across the Cedar River to the ADVANCE CONSTRUCTION CO., of Waukesha, Wis. The contract was formerly let to the Marsh Bridge Co., of Des Moines, but was rescinded. Estimated cost, $36,000.

WICHITA, KAN.—The contract for a new steel bridge across the Little River has been awarded to the MISSOURI VALLEY BRIDGE CO. at $18,600. Other bidders were: The Illinois Steel Bridge Co., $19,153; the Canton Bridge Co., $19,000; Standard Bridge Co., $19,795.

LINCOLN, NEB.—Bids are asked by W. L. Dawson, County Clk., until 2 p. m., April 20, for material and labor for all bridges that may be ordered for one year from date of contract.

ROCK SPRINGS, WYO.—The Green River Transit Co. has let to RASMUS ANDERSON contract to erect a swing bridge across the Green River at the point where the road between this city and Vernal, Utah, crosses the stream. The bridge will be of the suspension type with a main span 400 ft. in length. This span will consist of two heavy cables, stretched 4 ft. apart and at the lowest point 20 ft. above the river. Two-inch boards will be laid on the cables and bulwarks of heavy wire netting will be strung.

TRENTON, MO.—Bids are asked until 1 p. m., April 6, by M. H. Mooney, County Higtway Engr., for bridge work.

SEATTLE, WASH.—The Council has passed ordinances providing for the construction of pile bridges at various streets. Estimated total cost, $106,900. R. H. Thomson is City Engr.

KING CITY, CAL.—Bids will be received by T. P. Joy, Clk. Board County Supervisors, Salinas, until April 6 for an extension of bridge across Salinas River, near King City, to have three 120-ft. steel spans on concrete cylinder piers, etc. L. G. Hare is County Surv.

BARSDALE, CAL.—The following bids were opened on March 9 for the construction of a 7-span steel bridge over Santa Clara River at Barsdale: ATLANTIC, GULF & PACIFIC CO., 707 Herman W. Helman Bldg., Los Angeles, $34,869 (awarded contract); American Construction Co., San Francisco, $35,245; Cotton Bros. & Co., Oakland, $37,494; Minneapolis Steel & Machinery Co., San Francisco, $37,000; Modern Steel Structural Co., Los Angeles, $37,986; W. T. McBride, Los Angeles, $55,000; Pacific Construction Co., San Francisco, $39,983; Union Iron Works, Los Angeles, $34,985; Western Bridge & Construction Co., Sacramento, $37,777.

LOS ANGELES, CAL.—Bids are asked by the Board of Supervisors until 2 p. m., April 12, for the construction of a pile trestle bridge across the San Gabriel River in the Artesia road district. C. G. Keyes is County Clk.

SANDPOINT, IDAHO.—Bids will be received until April 12 by the County for the construction of a bridge across Pend d'Oreille River at First St. Estimated cost, about $15,000. John K. Ashley, Jr., of Sandpoint, is Engr.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

HARTFORD, CONN.—The second report of the Technical High School Commission to the Court of Common Council, dated Feb. 23, contains the following facts: Estimated cost of building, $600,000; estimated cost of furnishings, $40,000; contract will be let and work started Sept. 1; time for completing, 24 months; cost of new connections to and changes in Manual Training building to conform with new building, $15,000. Archibald A. Welch is Chn.; Thomas S. Weaver, Secy.-Treas. Comn.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 17, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., for additions to and installation of a lunch room in Building No. 14, U. S. Navy Yard, New York. Specifications are on file at the office of the Engineering News, New York.

Bids are asked until 11 a. m., April 24, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., for reconstruction of roof of Power-house No. 41, New York Navy Yard. Specifications are on file at the office of Engineering News, New York.

It is announced that V. Hugo Koehler, Arch., 489 Fifth Ave., is preparing plans for the theater to be erected on Lincoln Sq., at Columbus Ave. and 65th St. A 63-year lease has been obtained to the site, which will have a frontage of 50 ft. on the east side of Columbus Ave., beginning 50 ft. north of 65th St. and connecting at the rear with a plot 100 × 105 ft. in the north side of 65th St., 100 ft. east of Columbus Ave. Plans call for a seating capacity of 1,200, and work on the structure, it is said, will begin on May 1. The cost is estimated at $185,000. Sam S. and Lee Shubert, Inc., probably will control the house. No building contract has been issued.

Plans have been filed for a block of six 6-story flats to be built on Fifth Ave., from 138th to 139th Sts., for the Carmino Realty Co., Louis Schleter, Pres., 203 Broadway, to cost $240,000. Bernstein & Bernstein, 24 East 23d St., are Archs.

NEW YORK, N. Y.—We are officially advised that plans and specifications are being prepared for a 4-story terminal station to be built at the Manhattan end of Brooklyn Bridge. It will be a steel frame structure, with outside walls of granite, the roof to be copper and the exterior metal work cast bronze. The interior metal work will be cast iron. The designs are adapted from the classic. Francis V. L. Hoppin, 244 Fifth Ave., is Arch.

Jardine, Kent & Jardine, Archs., 3 West 29th St., have plans in progress for a 12-story high-class loft and store building, to cover a plot 50 × 100 ft., for Robert Alexander, builder, 119 West 24th St., to be erected at 45-47 West 27th St. and to cost $150,000. The exterior will be of light-colored brick, limestone and terra cotta. The owner will build. No sub-contracts have yet been placed.

Plans have been filed for a 6-story apartment house, with 45 suites, to be built for the Dacorn Realty Co., 95 Liberty St., at the corner of Fort Washington Ave. and 180th St., to cost $200,000. Moore & Landsiedel, Third Ave. and 148th St., are Archs.

An 8-story apartment house, with 41 suites, will be built by the Hennessy Realty Co., 220 Broadway, Joseph Polstein Pres., on 12th St., east of Broadway, to cost $200,000. Schwartz & Gross, 347 Fifth Ave., are Archs.

NEW YORK, N. Y.—Plans have been filed for two 6-story brick apartment houses each to contain 39 suites of room, and to cost $200,000, to be built from designs by Charles B. Meyers, Arch., 1 Union Sq., for the Rutgers Construction Co., on the Lenox Ave. block from 113th to 114th Sts.

Plans for a 10-story apartment house, containing accommodations for 60 families, to be built for the McMorrow Construction Co., on Washington Heights at Broadway and 157th St., from designs by Neville & Bagge, Arch., 217 West 125th St., and to cost $500,000. Also for a 5-story flat house, designed by the same architect, to be built for A. M. Shrady, on 157th St., west of Amsterdam Ave., to contain 21 suites, and to cost $40,000.

George F. Pelham, Arch., 503 Fifth Ave., has filed plans for a 6-story apartment house, to contain accommodations for 43 families and to be built for the Fort Washington Syndicate at the northwest corner of Fort Washington Ave. and 177th St. It is to be of brick and limestone, with a frontage of 127.7 ft. and a depth of 90 ft., and will cost $200,000.

The Flatbush Congregational Church will construct a church of red brick and limestone construction. The portico will be Doric with stone pillars. The total length of the church will be 105 ft. and the width will be 70 ft. The seating capacity on the floor will be 700 and the galleries 300. The building will cost $77,000; additional land, $13,000. The architects are Allen, Collens & Jallade, 1177 Broadway, Manhattan. The contractor is J. B. ROBERTS & CO., 1 Madison Ave., Manhattan. The interior finish will be white, with mahogany trimmings. The basement will be 68 × 56 ft., with a stage to be used for general assembly room.

NEW YORK, N. Y.—Plans have been filed with the Buildings Department for a 5-story residence for George S. Brewster at the northwest corner of Park Ave. and 71st St. It will be built from designs by Trowbridge & Livingston, Archs., 424 Fifth Ave., with facades of limestone-trimmed brick, having an avenue frontage of 50 ft. and 74 ft. on 71st St., which the central vestibuled porch entrance will face. The second story will have arched casement windows finished with ornamental railings. The main floor will contain a reception room and a dining room. The second story will have the library and salon, and there will be a playground and play house on the roof, surrounded by an ornamental balustrade. The building is to cost $200,000, and will have a passenger elevator.

The Kips Bay Realty Co., Benjamin Mordecai, Pres., which owns the southwest corner of Irving Pl. and 16th St., a plot 123 × 100 ft., irregular, has decided to improve the property with a 12-story store and loft building. A construction company will be organized to take over the property and erect the building, which will be ready for occupancy Jan. 1, 1910. Starrett, Goldwin & Van Vleck, Everett Bldg., are Archs.

Plans have been filed for a 10-story fireproof elevator apartment house to contain 44 suites of apartments, and to be built by Paterno Bros., Inc., on Claremont Ave., just north of 116th St., at a cost of $325,000. It is to have a frontage of 84 ft. on the avenue and a depth of 83 ft. Schwartz & Gross, 347 Fifth Ave., are Archs.

Plans have been filed for a 6-story apartment house with 36 suites, to be built for the Lansing Co., at the southeast corner of Riverside Drive and 156th St., at a cost of $200,000. George F. Pelham, 503 Fifth Ave., is Arch.

A 10-story loft and store building is to be erected for the estate of Walden Pell at 24 and 26 West 30th St. It is to be of limestone trimmed with terra cotta, and will have tiers of mezzanine windows bordered by tall pilasters at the sides of the facade. It is to cost $80,000.

NEW YORK, N. Y.—We are officially advised that a 10-story loft and store building, 25 × 82 ft., is to be erected for the estate of Walden Pell, at 24 and 26 West 30th St. It is to be of limestone trimmed with terra cotta, and will have tiers of mezzanine windows bordered by tall pilasters at the sides of the facade. It is to cost $80,000, according to the estimate of Pell & Corbett, Archs., 122 East 25th St. Contract will be let about April 10.

Bids are asked by the Board of Health of the Department of Health until 10 a. m., April 13, for furnishing and delivering timber, lumber, moulding, etc., to the Tuberculosis Sanitarium at Otisville, Orange County, N. Y., during the year 1909.

NEW YORK, N. Y.—Bids are asked by C. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 11 a. m., April 12, for alterations, repairs, etc., for Public Schools Nos. 5, 9, 10, 43, 54, 81, 93, 132, 157, 165, 166, 169, 179, 184, 186 and Wadleigh High School Boro. of Manhattan; and for alterations, repairs, etc., at Public School No. 83, Vernon Ave., between Pierce and Graham Aves., Long Island City, Boro. of Queens.

The following bids were received on March 29, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for installing heating and ventilating apparatus for additions to and alterations in (a) Public School No. 126, on the north side of Meserole Ave., between Lorimer and Guernsey Sts., Boro. of Brooklyn; in (b) Public School No. 128, on the northerly side of 21st Ave., between 83d St. and 84th St., Boro. of Brooklyn; in (c) new Public School No. 160 on the southerly side of Fort Hamilton Ave., between 151st and 152d Sts., Boro. of Brooklyn: Raisler Heating Co., 1966 Broadway, New York, (a) $23,570, (c) $30,970; E. Rutzler Co., 127 White St., New York, (a) $28,747, (b) $27,656, (c) $28,005; D. J. Rice, (a) $31,440, (b) $31,961, (c) $29,980; Frank Dobson Co., Inc., 319 East 53d St., New York, (a) $27,337, (b) $25,222, (c) $26,980; James Curran Mfg. Co., (a) $28,000, (b) $26,500, (c) $28,955; Blake & Williams, 211 West 20th St., New York, (a) $29,490, (b) $26,472, (c) $28,995; Gillis & Geoghegan, 537 West Broadway, New York, (a) $28,590, (b) $27,250, (c) $28,935; William J. Olvaney, 177 Christopher St., New York, (a) $29,980, (b) $28,597, (c) $32,350; Wells & Newton, (b) $29,985, (c) $26,480; Harry L. Philip, (c) $31,757.

CENTRAL ISLIP, N. Y.—The bids received by the State Commission in Lunacy on March 24 for construction of Nurses' (Attendants') home, including heating, plumbing and electric work at the Central Islip State Hospital were: Morris Kantrowitz, Albany, N. Y., $103,700; Peter Keeler Building Co., Albany, N. Y., $107,900; Rufus H. Brown, Brooklyn, N. Y., $123,924; M. E. O'Connor, Brooklyn, N. Y., $148,400; Chas. H. Peckworth, New York, $121,680; Herman Probst, New York, $124,700; R. Richards & Sons, Utica, N. Y., $126,235; James MacArthur, Brooklyn, N. Y., $127,472; William Crawford, New York, $167,865; Richard E. Henningham, New York, $120,490; North-Eastern Construction Co., New York, $109,233; Fountain & Choate, New York, $146,197; Ross-Bush Co., New York, $111,190; Kelly & Kelley, New York, $138,760; Bliss & Griffiths, New York, $123,352; F. T. Nesbit & Co., New York, $123,379; Wm. J. Moran, Inc., Brooklyn, N. Y., $146,665; George Hildebrand, New York, $132,400.

The bids received on the same day for glass enclosures for verandas at the Central Islip State Hospital were: Morris Kantrowitz, Albany, N. Y., $2,800; Peter Keeler Building Co., Albany, N. Y., $3,390; Rufus H. Brown, Brooklyn, N. Y., $3,140; M. E. O'Connor, Brooklyn, N. Y., $5,255; R. Richards & Son, Utica, N. Y., $3,940; James

MacArthur, Brooklyn, N. Y., $4,096; George Hildebrand, New York, $4,076; Commercial Construction Co., New York, $2,941; Fountain & Choate, New York, $5,165; Bliss & Griffiths, New York, $3,513; Ross-Bush Co., New York, $2,846. See item under Light and Power Plants.

SYRACUSE, N. Y.—Bids are asked by the New York State Fair Commission, Post Standard Bldg., Syracuse, N. Y., until 3 p. m., April 10, for the entire work of construction of the Administration, State, grange, dairy, press, stable and carriage buildings, annex to stable and carriage building, forage and blacksmith shop, loading dock near stable, two loading docks near manufacturers and liberal arts building, and high retaining wall along Bell Isle Road, at the State Fair Grounds, Syracuse. Green & Wicks, 116 Franklin St., Buffalo, N. Y., are Archs. A. E. Perren is Comr. of Grounds and Buildings, Post-Standard Bldg., Syracuse, N. Y.

SHORT HILLS, N. J.—It is stated that the Baltusrol Golf Club will rebuild the club house which was recently burned. The work will start with in a month and the new structure will cost about $60,000. Louis Keller and Hugh K. Taylor are members.

PHILADELPHIA, PA.—The Philadelphia Turngemeinde Building Committee has awarded the contract for its proposed building at Broad St. and Columbia Ave., on the site of the old Baird mansion, to J. E. & A. L. PENNOCK, Land Title Bldg. The building will cost about $150,000.

The WILLIAM STEELE & SONS CO., 1600 Arch St., has the contract to build a 5-story warehouse on the south side of Vine St., west of Third St., for the England & Walton Co. The building will be of the reinforced-concrete construction, with exterior walls of brick and stone. The cost will be $96,000.

Bids are asked until 11 a. m., April 20, by Lt. Col. F. G. Hodgson, Constr. Q. M., 26th St. and Gray's Ferry Road, Philadelphia, for construction, plumbing, elevators and electric wiring of one fireproof storehouse at this depot.

ANNAPOLIS, MD.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded contract for the construction of one general ward and two isolation ward buildings at the Naval Hospital, Annapolis, Md., to the NOEL CONSTRUCTION CO., German and Calvert Sts., Baltimore, Md., at $81,000. A complete list of bidders was given on March 25.

WASHINGTON, D. C.—The following bids were received March 23 by Bernard R. Green, Supt. of Construction, National Museum, Washington, D. C., for the marble wall bases, plinths, floor tiling, etc., and limestone screens for the south pavilion of the new National Museum Building: A. Klaber & Sons, Times Bldg., New York, $76,400; time, 120 days and 90 days; William Bradley & Son, 90 West St., New York, $49,950; time, 120 days and 120 days; Evans Marble Co., Baltimore, Md., $51,000; time, 120 days and 120 days.

GADSDEN, ALA.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office building at Gadsden, Ala., to MILES & BRADT CO., Atlanta, Ga., at $78,718. A complete list of bids was given on March 4.

LAKE CHARLES, LA.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has revoked the acceptance by the King Lumber Co., Charlottesville, Va., of the contract for the construction of post-office building at Lake Charles, La.

Bids are asked until 3 p. m., May 3, by James Knox Taylor, for constructing (complete) of the U. S. post-office at Lake Charles.

LOUISVILLE, KY.—The Union Depot, on Seventh St., used by the Illinois Central, Cleveland, Cincinnati, Chicago & St. Louis, Baltimore & Ohio Southwestern, Southern and Chesapeake & Ohio railroad companies, was destroyed by fire recently at a loss of $300,000. It is reported that the station will be rebuilt. A. E. Egan is Supt. of the Illinois Central R. R. Co., owner of the station.

CLEVELAND, OHIO.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has increased the contract of JOHN GILL & SON, Cleveland, Ohio, by $93,750, to cover additional work in connection with the interior finish of the post-office at Cleveland, Ohio.

CINCINNATI, OHIO.—Maurice Wolfson, Treas. of I. M. Martin's Chester Park Co., has applied for a building permit to erect a theater and roof garden at 941 McMillan St. According to specification the structure will cost $100,000. The materials to be used in the building will be brick, steel and concrete, practically no wood or other inflammable material being in contemplation. Work will be begun as soon as the plans have been approved by the building inspector.

CANTON, OHIO.—Bids are asked until noon, April 22, by the Board of Education for furnishing the necessary labor and material for the building of a four-room addition to the Liberty St. school, a four-room addition to the Dueber Ave. school and a four-room addition to the Hartford St. school, Canton, Ohio. W. C. Lane is Clerk.

*MICHIGAN CITY, IND.—Bids are asked until 3 p. m., May 1, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction (including plumbing, gas piping, heating, apparatus, electric conduits and wiring), of the U. S. post-office, Michigan City.

FORT WAYNE, IND.—The School Board is preparing to ask for bids for the construction of two school buildings. Henry Meyer is Arch.

MOLINE, ILL.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Moline, Ill., to JAMES DE VAULT & SON, Canton, Ohio, at $80,900. A list of bids was given on March 18.

NORTH CHICAGO, ILL.—Specifications for constructing commandant's house, six houses for officers' quarters and hospital group are on file at the office of Engineering News, New York. Bids are asked until April 26. Noted on March 11.

CHICAGO, ILL.—The GEORGE A. FULLER CO., which has been awarded the contract to construct the Chicago & Northwestern station here, has awarded contracts for the stone to BOOTH BROS., the BODWELL GRANITE CO. and the HURRICANE ISLAND GRANITE CO. The granite will be quarried and manufactured entirely in Maine.

Plans have been prepared for remodeling the interior and fireproofing the floors of the old Inter-Ocean building, at the northwest corner of Dearborn and Madison Sts. The leasehold interest and building were acquired recently by A. L. and A. W. Hannah. The building will be transformed into a hotel containing about 200 rooms. The office and main entrance will be on Dearborn St. It is estimated that the changes will cost around $75,000.

Work is to begin May 1 on the building to be put up by the Steger & Sons Piano Co., at the northwest corner of Wabash Ave. and Jackson Boulevard. The structure will be 18 stories, with two basements. The total cost will be $800,000. Marshall & Fox are Archs., First National Bank Bldg. The piano company will occupy five stories and the remainder of the building will be devoted to offices. The woodwork is to have what is known as a piano finish.

*KEWANEE, ILL.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 28, for the construction complete of the U. S. post-office building at Kewanee.

ST. PAUL, MINN.—J. W. Stevens, Arch., New York Life Bldg., is preparing plans for a 4-story addition to the wholesale dry goods building of Finch, Van Slyck & McConville, Fourth and Sibley Sts. It will be of pressed brick and cut stone construction, with steam heating, electric lighting.

Sketches are being made by E. L. Masqueray, Arch., 312 Dispatch Bldg., for the construction of a 2-story pressed brick and cut stone fireproof library building for St. Paul's Seminary. Rev. J. Heffron is Pres. Cost, $60,000.

FORT CROOK, NEB.—Bids are asked until 11 a. m., April 12, by Capt. Joseph F. Gohn, Constr. Q. M., for construction of a brick addition to the post hospital, and for installing plumbing and electric wiring in the addition.

ABERDEEN, S. DAK.—F. H. Ellerbee, Arch., 649 Endicott Bldg., St. Paul, is preparing plans for a 6-story pressed brick and cut stone, fireproof bank and office building, to be built at Aberdeen, by the Citizens' Trust & Savings Bank. It will be 50 x 140 ft., with steam heating, electric lighting and electric passenger elevator. Cost, $125,000.

RUGBY, N. DAK.—The contract for the construction of the cut stone court-house at Rugby, according to plans of Buechner & Orth, St. Paul, is stated to have been awarded to J. W. MILLER, 223 Dayton Ave., St. Paul, whose bid was $71,000.

BOULDER, COLO.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., received bids as follows on March 25 for the construction of a post-office building at Boulder, Colo.: Northwestern Construction Co., Wahpeton, N. Dak., $49,949; Ladd-Sanger Contracting Co., Denver, Colo., $52,000; W. E. Towers, Denver, Colo., $49,968; Fred T. Adams, Denver, Colo., $51,730; Jay C. Lee, Boulder, Colo., $59,557; McHenry-Beatty Co., East Liverpool, Ohio, $47,880; Schurmann Lumber Co., Inc., Saginaw, Mich., $48,790; J. H. Wiese, South Omaha, Neb., $54,784. Time, March 31, 1910.

FORT BAYARD, N. MEX.—Bids were received at Fort Bayard on March 16 for construction, etc., of (a) three double sets of captains' quarters, (b) one nurses' quarters, as follows: Atkinson Bros., Colorado Springs, (a) $88,890, $87,390, $88,590, (b) $32,300, $31,500, $31,900; J. A. Harlan, Fort Bayard, (a) $64,200, (b) $23,600; M. M. Sundt, East Las Vegas, N. Mex., (a) $76,710, (b) $27,995; E. A. Steininger Construction Co., Victoria Bldg., St. Louis, (a. $98,889, (b) $36,272; Otto P. Kroeger, Bisbee, (a) $83,310, $82,710, $82,110, (b) $25,700, $25,300, $25,200; W. G. Fuller, Leavenworth, Kan., (a) $83,121, $81,300, $82,800, (b) $28,957, $27,550, $28,900; Morrison Contracting & Mfg. Co., Cooper Bldg., Denver, (a) $89,700, $88,500, $89,000, (b) $32,200, $31,500, $31,900.

TIBURON, CAL.—We are officially advised that Scofield Engineering Co., Consult. Engrs., Scofield Bldg., Philadelphia, Pa., have been engaged to make details and let sub-contracts for U. S. Naval Coaling Station which is to be constructed at California City Point, Cal. This contract was recently secured by HOISTING MACHINERY CO., 50 Church St., New York, and is to be completed this year.

SAN FRANCISCO, CAL.—The Hecht Investment Co. intends to erect soon a 5-story Class A apartment building on the northeast corner of Van Ness Ave. and Post St., to cost $300,000. The lot has a frontage of 247 ft. on Post St. and 120 ft. on Van Ness Ave. It has a frontage on Walnut St. also.

TWIN FALLS, IDAHO.—GEORGE CURLEY has secured the contract for the construction of the County court-house and jail. His bid was $123,000.

WINNIPEG, MAN.—The School Board has awarded the contract to SAUL & IRISH, of this city, for the erection of a stone and brick school. Cost, $69,920.

C. W. SHARPE has secured the contract for the erection of the proposed building for the Canada Permanent Loan Co., at $68,000.

WINNIPEG, MAN.—Additional bids will be called for work in connection with the union depot to be erected here at an approximate cost of $2,000,000; M. H. McLeod is Gen. Mgr. of the Canadian Northern R. R. Plans are being prepared for an addition to the Queen's Hotel and for several additional stories on the present building. Oswald Montgomery is Proprietor. Smith & Bruce, Archs., are preparing plans for a theatre to be erected here with a seating capacity of 1,300 at an estimated cost of $50,000. The Winnipeg Builders' Exchange is considering plans for an exchange and office building. Northwood & Naffke, Northern Bank Bldg., have partially completed plans, for which tenders will be called this month, for five residences costing an average of $10,000 each. Victor W. Horwood, Arch., 177 McDermott Ave., East, is preparing plans for a fully modern hotel to cost $40,000 for the Winnipeg & Lake of the Woods Development Co. William Fingland, 400 Main St., is preparing plans for a stone, brick and steel business and office building to be erected on Portage Ave. for a local syndicate. The Franciscan Sisters are having plans prepared for a Roman Catholic home for working girls. J. A. Senecal, St. Boniface, Man., is Arch.

LETHBRIDGE, ALTA.—Bids will be received by C. B. Bowman, Secy., until 1 p. m., April 10, for erection of a fireproof hospital. Plans and specifications may be seen at the offices of Osler, Hammond & Nanton, Winnipeg; Lloyd Newburn, Calgary, or C. B. Bowman, Lethbridge.

MEXICO CITY, MEXICO.—The Depot Quartermaster, Washington, D. C., has rejected as excessive the bids recently received for the construction of a lodge at the National Cemetery, City of Mexico.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

EVERETT, MASS.—Bids will be received by the Board of Public Works, William J. Brickley, Chn., until April 2 for water pipe and fittings.

FORT ANDREWS (Boston post-office), MASS.—We are officially advised that bids were opened on March 19 by Capt. R. H. Rolfe, Q. M., U. S. A., Boston, for extension of water-works and sewerage system at Fort Andrews. The following bids were received: Frank Williams & Bro., Boston, $2,450; Antony Cefalo, Boston, $3,416; Andrew M. Cusack, Boston, $3,745; James H. Ferguson, Dorchester, $3,945; Peter F. Connolly, Jamaica Plain.

*NEW YORK, N. Y.—The BRADLEY CONTRACTING CO., 1 Madison Ave., New York, was awarded contract by the Board of Water Supply on March 30 for contract No. 24 for the construction of Turkey mountain grade tunnel, situated about six miles northeast of Croton-on-Hudson in the town of Yorktown, Westchester County, at about $973,604. List of bidders noted on March 25.

Bids were opened on March 30 by the Board of Water Supply for contract No. 25 for the construction of Croton and Chadeayne tunnels, Kitchawan and Millwood North cut-and-cover in the Croton division of the Catskill Aqueduct in the towns of Yorktown and New Castle, Westchester County: C. W. Blakeslee & Son, New Haven, Conn., $1,269,830; MacArthur Bros., 11 Pine St., $1,322,630; M. A. Talbot Co., Baltimore, $1,320,995; Foye & Root, 20 Broad St., New York, $1,418,370; John J. Hopper, 1170 Broadway, $1,735,429; Bradley Contracting Co., 1 Madison Ave., $1,334,615; J. H. Gray, Fuller Bldg., $1,383,450; Booth & Flynn, 1942 Forbes St., Pittsburg, $1,303,720; American Pipe Mfg. Co., Fidelity Bldg., Philadelphia, $1,377,085.

*NEW YORK, N. Y.—List or itemized bids received by the Board of Water Supply on March 18 for Contract No. 47 is given in this issue under Contract Prices. The bid of the DEGNON CONTRACTING CO. (to whom contract was awarded) was erroneously given last week at $3,982,726. It should have been $4,498,726.

ROME, N. Y.—Bids will be received by the Board of Water and Sewer Commissioners, Harvey S. Bedell, Chn., until noon, April 21, for laying about 28,535 ft. of 30-in., 2,025 ft. of 24-in. and 780 ft. of 20-in. c.-i. pipe; also furnishing valves and hydrants for this line. Knight & Hopkins, of Rome, are Engrs. Advertised last week.

ROCHESTER, N. Y.—Contract for furnishing c.-i. water pipe was awarded on March 21 by the Board of Contract and Supply to the U. S. CAST-IRON PIPE & FOUNDRY CO., 71 Broadway, New York, at $87,180. Edwin H. Fisher is City Engr.

BAYONNE, N. J.—Bids will be received until 8 p. m., April 6, by the city for furnishing all labor and material for water extension No. 584. About 40 tons of 6 to 8-in. pipe and 32 hydrants will be required. W. C. Hamilton is City Clk.

WOODBURY, N. J.—Bids will be received until April 6 by the City Council for furnishing f. o. b. cars at Sewell, Wenonah and Woodbury Heights, on the West Jersey & Sea Shore R. R., 16,000 ft. of 16-in. pipe, eight 16-in. stop valves, about two tons special castings, etc.; also a separate bid, for laying c.-i. pumping main from the pumping station of the Woodbury waterworks to the reservoir on Rpe's Hill.

LYNDHURST (Rutherford post-office), N. J.—Bids will be received until April 5 by the township Committee, Township of Union, at Odd Fellows Hall, Valley Brook Ave., Lyndhurst, for the distribution of water pipe specials, hydrants, gate valves, etc., and the laying of same. R. M. Watson is Township Engr., Rutherford.

BRANCHVILLE, N. J.—Contract for the construction of a water system here was awarded on March 18 to FRITTS & PARTRIDGE, of Dover, N. J., at $27,083. W. E. Sexton is Engr. Noted on March 18.

ELIZABETH, N. J.—HARDIMAN & DEDRICKSEN, of Perth Amboy, N. J., have been awarded contract to lay about 5½ miles of water mains for the Elizabethtown Water Co. The work consists of laying a 24-in. pipe line from Linden to Elizabeth, and a 20-in. line from Elizabeth to Elizabethport. Estimated cost, about $25,000.

LEBANON, PA.—Bids were opened on March 11 by the Board of Water and Light Commissioners, J. D. Kerr, Secy., for enlarging dam No. 2, gravity water supply. The lowest bid was submitted by Riley & Fritz, of Lancaster, Pa., $22,537. The work will include about 3[illegible] cu. yds. of earth in the dam breast, [illegible] ft. concrete intake tower, about 52 ft. high, [illegible] T. R. Crowell is City Engr.

HAZLEHURST, GA.—The [illegible] has voted $18,000 of bonds for the construction of water-works.

*NEW ORLEANS, LA.—[illegible] will be received by the Sewerage and Water Board until 3 p. m., April 27, for [illegible] shing brass goods. Specifications with [illegible] k form of proposal can be obtained [illegible] application at the office of the Board, [illegible] 2 Carondelet St. F. S. Shields is Secy.

NASHVILLE, TENN.—The [illegible] ty awarded contract on March 18 to the [illegible] M. LEFTWICH CO., of Nashville, at [illegible] 3, for laying 25,780 ft. of water mains.

OAKLEY (Cincinnati post-[illegible]), OHIO.—Bids will be received by Oscar [illegible] Rosche, Village Clk., until noon, April [illegible] for furnishing and laying 6-in. water pipe in Webster Ave., from Clark to Edwards Road, and in Edwards Road, from Webster Ave. to Williams St.

ST. HENRY, OHIO.—Bids are asked until noon, April 20, by the Board of Trustees of Public Affairs for the construction of water-works. Plans and specifications are on file at the office of William [illegible] Schweiterman, Clk. Paul R. Murray, [illegible] Philadelphia, Ohio, is Consult. Engr.

PUT-IN-BAY, OHIO.—Bids will be received by the village until noon, April 22, for the construction of a municipal water-works system.

SOUTH BEND, IND.—Bids will be received by the Board of Public Works until April 9 for furnishing material and constructing a reinforced-concrete reservoir of 1,000,000-gallons' capacity. A. J. Hammond is City Engr.

*DOWAGIAC, MICH.—The contract was not let on March 16 for steam pumps for water-works system, on changing present water-works to take water from Pine Lake, including erection of standpipe and also a producer gas plant. It has been decided to employ a consulting engineer to prepare plans and specifications. C. H. Antisdel is City Clk.

JACKSON, MICH.—Bids will be received by the Board of Public Works until April 6 for water pipe, hydrants, valves and water meters.

GRAND RAPIDS, MICH.—Contract for erecting at the water-works pumping station one vertical triple-expansion pumping engine of 12,000,000 gallons' daily capacity, was awarded on March 19 by the Board of Public Works to the ALLIS-CHALMERS CO., of Milwaukee, Wis., at $58,700. L. W. Anderson is City Engr. List of bidders noted last week.

MOLINE, ILL.—F. E. KAMINSKY, of Watertown, Wis., was awarded contract on March 18 by the Board of Local Improvements for (a) about 11,240 ft. 6 and 4-in. water pipe, with valves and hydrants, at $10,312, and (b) for 25,812 lin. ft. 15 to 6-in. pipe sewer at $23,865. Other bidders were as follows: Charles Berglund, Moline, (a) $12,950, (b) $25,640; Monahan Bros., Joliet, (a) $13,477, (b) $25,311; E. R. Harding Co., (a) $12,158, (b) $23,722; Independent Construction Co., Davenport, Iowa, (a) $14,126, (b) $29,179; J. W. Turner Improvement Co., Des Moines, Iowa, (a) $9,686, (b) $28,071; People's Construction Co., Davenport, Iowa, (a $13,943, (b) $26,251; H. C. Gass, Belleville, (a) $12,274, (b) $22,090; W. F. Brunt, Hammond, Ind., (b) $23,154.

COLFAX, ILL.—The contract for constructing water-works here has been awarded to the LEADER IRON WORKS, of Decatur, Ill., at $5,850.

LA CROSSE, WIS.—Bids will be received until April 2 by the Board of Public Works, H. J. Beckwith, Chn., for furnishing material and constructing water extensions in numerous streets, including Farnam, Main and Grove Sts., requiring about 19,768 ft. of 12 and 6-in. pipe.

JACKSON, MINN.—The contract for the 100,000-gal. steel water tank and trestle has been awarded by the city to the MINNEAPOLIS STEEL & MACHINERY CO., Minneapolis, at $5,897. Loweth & Wolf, St. Paul, Minn., are Consulting Engrs.

WICHITA, KAN.—The Council on March 15 awarded contract for constructing the new water-works plant for the city to the MUNICIPAL CONSTRUCTION CO., of Denver, Colo., at $849,754.

FORT CROOK, NEB.—Bids are asked by Capt. Joseph F. Gohn, Constructing Q. M., U. S. A., until 11 a. m., April 12, for sinking one 10-in. tubular well to a depth not exceeding 200 ft.

BELLE FOURCHE, S. DAK.—The PEOPLES CONSTRUCTION CO., of Davenport, Iowa, has been awarded the government contract for the construction of the concrete work of controlling part of the irrigation system which is to be built at Belle Fourche.

HARLEM, MONT.—Bids are asked until 2 p. m., April 15, by the Commissioner of Indian Affairs, Washington, D. C., for furnishing materials and labor required to construct a water system at Fort Belknap Agency, Mont. Information may be obtained from W. R. Logan, Superintendent, Harlem.

KANSAS CITY, MO.—The Fire and Water Board awarded contracts on March 19 as follows: For a 15,000,000-gallon pump for Turkey Creek Pumping station to the ALLIS-CHALMERS CO., Milwaukee, Wis., at $113,710; for 25,000,000-gallon pump for Quindaro station to A. M. LOCKETT CO., of New Orleans, at $20,636. S. J. Armstrong is Secy. Bd.

*LEHIGH, OKLA.—Bids will be received by John Rogers, City Clk., until April 5 for the purchase by the city of all material, machinery and apparatus needed in the construction and extension of the water-works system. Specifications of requirements can be had by addressing the O'Neil Engineering Co., Dallas, Tex.

ANTONITO, COLO.—Bids for the construction of a water-works system here under three separate divisions or for the complete system, will be received at the office of the City Engineer until noon, April 7. Division of work is as follows: Excavation and backfilling, materials complete, laying pipe, setting valves, gates, hydrants, etc.

*SAN FRANCISCO, CAL.—See item under Sewerage.

The U. S. CAST-IRON PIPE & FOUNDRY Co., Monadnock Bldg., has been awarded contract by the city for 45,000 tons of water and sewer pipe. Estimated cost, about $1,-000,000. Noted last week.

CALGARY, ALTA.—The Calgary Colonization & Irrigation Co. has let contract to FOLEY, WELCH & STEWART for the construction of 500 miles of ditches here for irrigation purposes.

SASKATOON, SASK.—Bids are asked by T. H. Truesdale, City Clk., until 8 p. m., April 13, for laying water mains and sewer pipe and furnishing materials for same.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

HARTFORD, CONN.—The Court of Common Council has approved plans for the construction of a sewer in Hudson St., from Buckingham St. southerly.

SOUTH NYACK (Nyack post-office), N. Y.—The citizens on March 16 voted to issue $12,000 of bonds for the construction of a sewerage system.

YONKERS, N. Y.—Bids are asked by the Board of Contract and supply until 8 p. m., April 5, for constructing a sewer in Cedar St., between Elm and Spruce Sts. James D. McIntyre is Secy. Bd.

ALBANY, N. Y.—See item under Streets and Roads.

NEW YORK, N. Y.—Bids are asked by Louis F. Haffen, Pres. Boro. of the Bronx, until 11 a. m., April 6, for furnishing and delivering hardware supplies, etc., to the Bureau of Sewers.

NEW YORK, N. Y.—Bids were received as follows on March 24 by John F. Ahearn, Pres. Boro. of Manhattan, for furnishing all the labor and materials required for repairs, rebuilding and reconstructing of brick, pipe and box sewers, during the year 1909.: Hickey Contracting Co., 13 Park Row, $15,-730; Joseph Moore, $21,220; Bart Dunn, $22,228.

LONG ISLAND CITY (L. I.) N. Y.—Bids are asked until 11 a. m., April 12, by Lawrence Gresser, Pres. Boro. of Queens, for constructing sewers, receiving basins, temporary receiving basin and appurtenances in various streets.

KEARNY, N. J.—Bids will be received until April 8 by the Town Council for laying a sewer in a portion of Beech St. Harry P. Kremer is Town Surv., 788 Broad St., Newark.

TRENTON, N. J.—Bids will be received by the Common Council until April 6 for constructing a drain in New York Ave. and across lands of several companies. Harry B. Salter is City Clk.

PERTH AMBOY, N. J.—An ordinance was passed on March 15 by the City Council providing for the construction of a trunk sewer to empty into Raritan River. Estimated cost, $80,000. Wilbur La Roe is City Clk.

CARLSTADT, N. J.—Bids will be received by the Mayor and Borough Council until April 15 for the construction of a system of sanitary sewers and a sewage disposal plant. Wise & Watson are Consulting Engrs., Rutherford.

DARBY, PA.—Bids will be received until April 5 by A. N. Appleton, Chn. Sewer Com., for constructing a 10-in. terra cotta sewer in a portion of Main St. A. F. Damon, Jr., is Boro. Engr., Post-office Bldg.

DUNMORE, PA.—Bids will be received until 8 p. m., April 6, by the Borough for the construction of Section O of the sewer system, which includes sewers on Second, Third and Fourth Sts. Charles H. Genter is Secy.

OAKMONT, PA.—Bids are asked by the Borough Council until 7.30 p. m., April 5, for the construction of a brick storm sewer. Douglass & McKnight are Boro. Engrs.

*RIDGWAY, PA.—Bids will be received by the borough addressed to S. S. C. Chilcote, Secy., until 6 p. m., April 12, for performing all labor and furnishing all material, exclusive of the terra cotta pipe, required in and about the construction of a system of sanitary sewers, length and sizes of which are approximately as follows: 360 ft. of 15-in., 1,890 ft. of 12-in., 440 ft. of 10-in., 3,350 ft. of 8-in., 18 manholes.

WASHINGTON, D. C.—Bids will be received by the Commissioners of the District of Columbia, until noon, April 26, for constructing sewers in Fourth St. S. E., between Virginia and North Carolina Aves., and for constructing Luzon Ave. trunk sewer and sewer in valley north of R St., between Rock Creek and Observatory Lane.

WINCHESTER, VA.—Seventeen bids were submitted on March 25 for installing the sewerage system. The bids ranged from $27,000 to $49,000. The lowest bid submitted was that of the Central Construction Co.

*BIRMINGHAM, ALA.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of storm sewer mains and branches thereto. Bids are asked until April 21. Maury Nicholson is City Engr.

COLUMBUS, OHIO.—Bids will be received by the County Commissioners until noon, April 21, for constructing a sewer pipe drain along the south side of West Fifth Ave., from Elmer Ave. to the Olentangy River, in Franklin Township.

*OXFORD, OHIO.—Bids will be received by the Village Council, until noon, April 9, for the construction of a sewage disposal plant, consisting of a sedimentation tank, filter beds, automatic distributing machinery and controlling house, and necessary sewer and drainage appurtenances. Plans and specifications can be seen at the office of the Village Clerk, or at the office of the Riggs & Sherman Co., Engrs., Toledo, Ohio. D. P. Beaton is Village Clk.

ANGOLA, IND.—We are officially advised that bids were not received March 29 as advertised, owing to a clerical error which was detected in the declaratory resolution and advertisement causes the city to commence over. It will delay the matter probably five or six weeks, but contractors will be given due notice as to the time.

INDIANAPOLIS, IND.—See item under Buildings.

ANN ARBOR, MICH.—Bids were opened on March 17 by the Board of Public Works for constructing 15,700 ft. of 8 and 10-in. pipe sewer. Lowest bid was that of Koch Bros., of Ann Arbor, at $8,377. E. W. Groves is City Engr.

SILVIS, ILL.—Bids will be received until April 3 by Board of Local Improvements, George Sleetch, Secy., for furnishing material and constructing sewers in several streets, about 3 1-3 miles, and water mains, about same. H. G. Paddock is Engr., Moline.

MOLINE, ILL.—See item under Water Supply—Irrigation.

LA CROSSE, WIS.—Bids are asked until 2 p. m., April 15, by the Board of Public Works, Arthur J. Roberge, Secy., for the construction of about 8,651 lin. ft. of sewer from 24-in. circular pipe sewer to 52 by 72-in. egg-shaped reinforced-concrete sewer. Estimated cost, $73,929.

LAWRENCE, KAN.—Bids are asked until 5 p. m., April 5, by F. D. Brooks, City Clk., for constructing 2,900 ft. of 8-in. pipe sewer.

MARION, KAN.—The letting of contracts on March 22 for septic sewage disposal tank in sewer district No. 3 has been postponed on account of creating additional sewer districts and the probable adoption of a single septic sewage disposal tank for the accommodation of all of sewer districts in the city. Bids will be asked later.

WASHINGTON, KAN.—We are officially advised that the contract for the construction of sanitary sewers here was awarded on March 22 by the city to the ENGINEERING & CONSTRUCTION CO., of Webb City, Mo., at $23,750. Contract for septic tank was let to same firm at cost of labor plus 10%, the city to furnish all material. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

OMAHA, NEB.—Bids are asked until 2 p. m., April 5, by the City Engineer for the construction of a sewer in sewer district No. 380.

*WILLISTON, N. DAK.—We are officially advised that bids were received as follows on March 22 by the city for the construction of a system of sanitary sewers: JAMES KENNEDY, Fargo, N. Dak., $9,544 (awarded contract); C. H. Porritt, $9,750; Ilstrup & Olson, $9,771; George W. Kemper, $10,254; J. S. Penson, $13,598. Will T. Poe is City Audr.

ABERDEEN, S. DAK.—Bids were opened on March 15 by F. W. Raymond, City Audr., for constructing about 4,332 ft. of 10-in. and 2,906 ft. of 12-in. pipe sewers. The contract has been awarded to J. J. DUNNEGAN, of Shenandoah, Iowa.

BUTTE, MONT.—Bids will be received by the City Council until 5 p. m., April 7, for the construction of a reinforce-concrete storm culvert in the second gulch from Galena Alley to the south side of Porphyry St. M. A. Berger is City Clk.

KANSAS CITY, MO.—Bids were opened by the Board of Public Works on March 16 for installing a gate valve, pump, motor, etc., and necessary appurtenances on sewer in joint sewer districts Nos. 237, 238 and 239 in sewer division No. 1, near bank of Missouri River. The contract has been awarded to A. D. JOHNSON, at $12,000, to be completed in four months.

KINGFISHER, OKLA.—The City Council has awarded contract for the construction of the main sanitary sewer system to T. W. ROBERTS, of Independence, Mo., at $5,187. Under the terms of the contract, work must commence within 20 days and be completed within five months. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

SEATTLE, WASH.—The City Council has passed ordinances providing for the construction of sewers in the following streets: 32d Ave. South and other streets, $4,000; 30th Ave. South and other street, $5,100; 1st Ave. West and other streets, $23,500; 22d Ave. N. W. and other streets, $23,130; Aurora Ave. and other streets, $6,500; Pasadena Pl. and other streets, $5,450; Fifth Ave. N. E. and other streets, $5,625. R. H. Thomson is City Engr.

*SAN FRANCISCO, CAL.—The attention of contractors is directed to the fact that the city and county of San Francisco proposes to construct a new sewer system and an auxiliary water supply system for fire protection. The total cost of the sewer system will be $4,000,000. The estimated cost of the work included in the individual contracts to be let during the current year ranges between $50,000 and $300,000. A number of adjacent contracts will, from time to time, be let on the same date, giving the contractors an opportunity to secure contracts for several pieces of work at the same time. The total cost of the auxiliary water supply system is $5,200,000. The work which it is proposed to contract for during the current year includes the construction of 50 reinforced-concrete fire cisterns, the laying of 91 miles of c.-i. water pipe, the construction of two salt-water pumping stations, and the construction of two reinforced-concrete reservoirs. On all of the above contracts, monthly payments will be made. Further information can be obtained from Robt. Lougherv, Secy. Bd. Pub. Wks., San Francisco. Marsden Manson is City Engr.

EDMONTON, ALTA.—The EDMONTON HEATING & PLUMBING CO. has been awarded contract to supply the city with 77,000 ft. of sewer pipe, at $32,161.

SASKATOON, SASK.—Bids will be received by W. Hopkins, Mayor, until 8 p. m., April 13, for all labor necessary and the supply of manholes and piping for a sewerage system. Plans and specifications may be seen at the office of Willis Chipman, C. E., 103 Bay St., Toronto, Ont.

GARBAGE DISPOSAL.

*WEST POINT, N. Y.—Bids will be received by the Constructing Q. M., U. S. A., until noon, April 16, for one garbage crematory. Forms and specifications furnished upon application.

DU BOIS, PA.—A garbage disposal plant will be built here this summer by John Nicholson, Health Officer. It will be a private undertaking, operated by him and not by the city. The plant will be started within two months, and will be completed about the middle of the summer. Full equipment, including wagons, horses, materials of construction, etc., will be required.

*EASTON, PA.—The following bids were opened by the Department of Garbage Disposal on March 22, for the construction and erection of a plant for the incineration of garbage, night-soil, ashes and other refuse: Dixon Engineering & Construction Co., Toledo, Ohio, 25-ton plant in 24 hrs., $11,480 and $12,580; 35-ton plant, same, $14,662 and $15,862; Power Specialty Co., 111 Broadway, New York, 25-ton plant, $28,811 and $28,336; 35-ton plant, $30,462 and $34,374; Decarie Incinerator Co., Minneapolis, Minn., 25-ton plant, $24,500; 35-ton plant, $34,000; K. P. B. Sewerless Sanitary Garbage Furnace, Lancaster, Pa., 25-ton plant, $24,000; 35-ton plant, $26,000; David E. Bennett, Wilkes-Barre, Pa., 35-ton plant, $16,840; Morse-Boulder Destructor Co., New York, N. Y., 25-ton plant, $10,000 and $10,500; 35-ton plant, $10,500 and $11,000; Lewis & Kitchen, 100 Michigan Ave., Chicago, Ill., 25-ton plant in 24 hrs., $9,800; 25-ton plant in 20 hrs., $14,600; 25-ton plant in 10 hrs., $25,800; 25-ton plant in 12 hrs., $31,600; 35-ton plant in 20 hrs., $16,900; 35-ton plant in 14 hrs., $28,700; 35-ton plant in 16 hrs., $36,500. John McNeal is City Engr.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids will be received until noon, April 5, by the Metropolitan Park Commission, John R. Rablin, Engr., Boston, for a road in Charles River Reservation, Watertown, requiring approximately 3,500 cu. yds. of earth grading, 1,150 lin. ft. of 10-in. and 100 lin. ft. of 24-in. vitrified pipe, 20 cu. yds. of Portland cement concrete, 17 concrete catch basins, 45 lin. ft. of straight edgestone, 175 lin. ft. of curved edgestone, 500 cu. yds. loam surfacing, 3,000 cu. yds. loam to be furnished by contractor, 14,000 sq. yds. roadway and 5,200 sq. yds. walk surfacing, 600 lin. ft. iron fence.

*BRIDGEPORT, CONN.—We are officially advised that contracts were awarded as follows on March 26 by the city for furnishing materials to lay about 23,580 sq. yds. of street paving. The quantities of material are as follows: 23,580 sq. yds. of brick or wood block, 3,620 cu. yds. of sand, 5,620 tons crushed stone, 4,325 bbls. of Portland cement: MACK MFG. CO., Philadelphia, Pa., for Mack repressed block, at $34.26 per M. with 10-yr., $31.20 with 5-yr. guarantee, $31.26, no guarantee, $1.34 per sq. yd. with 5-yr. guarantee and no guarantee; AMERICAN CREOSOTE CO., New York, by Silliman Godfrey Co., for American wood-blocks, at $1.90 per sq. yd. with 5-yr. guarantee and with no guarante, $35.18½ per M. with 5-yr. and with no guarantee; B. D. PIERCE, JR., CO., Bridgeport, Conn., or Vulcanite cement, 400 gross lbs. per bbl., at $1.56 f. o. b. Bridgeport; same firm, for sand at 63½ cts. per cu. yd. f. o. b. Bridgeport and 97½ cts. delivered; for stone, SILLIMAN & GODFREY CO., Bridgeport, at 75 cts. per ton f. o. b. Bridgeport, and $1 per ton delivered. M. F. McKenna is City Engr.

HARTFORD, CONN.—Plans for the following road work have been received in the office of the State Highway Commission: From R. E. Mitchell, Engr., 9,100 ft. on the main road in the town of Hampton; from M. J. Unkleback, Engr., 4,800 ft. on the Stanley Quarter Road in the city of New Britain; 1,500 ft. on the New Haven Turnpike in the town of Milford.

BROOKLYN, N. Y.—The contract for furnishing and delivering 100,000 sq. ft. of bluestone flag to be delivered at the Wallabout yard, Wallabout Basin, foot of Hewes St., Brooklyn, has been awarded by Bird S. Coler, Boro. Pres., to the JAMES QUINN CONTRACTING CO., 36 Kenmore St., Brooklyn, at $18,170. Bids were opened on March 10. List of bidders noted on March 18.

BROOKLYN, N. Y.—Bids are asked by Bird S. Coler, Boro. Pres., until 11 a. m., April 7, for regulating paving and repairing several streets with asphalt pavement on a concrete foundation.

BROOKLYN, N. Y.—Bids are asked by the Park Board, Fifth Ave. and 64th St., Manhattan, until 3 p. m., April 15, for furnishing and delivering dust preventive or road oil in Prospect Park, Borough of Brooklyn. Henry Smith is Pres. Bd.

Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., April 14, for regulating and paving with asphalt pavement on a concrete foundation the roadways of several streets.

LONG ISLAND CITY (L. I.), N. Y.—Bids are asked by Lawrence Gresser, Pres. Queens Boro., until 11 a. m., April 12, for regulating, grading and constructing concrete cement and bluestone sidewalks on several streets, repairing and maintaining sheet asphalt pavement, furnishing and delivering two 10-gross-ton steam road rollers, furnishing and delivering to the Bureau of Highways broken stone and screenings of limestone and broken stone and screenings of trap rock.

CORNING, N. Y.—McGREEVY, McGUIGAN & BAUM, Elmira, N. Y., were lowest bidders, at $13,380 for paving East Market St., from Steuben to Conhocton Sts., with brick and macadamizing Pearl St., from First to Second Sts., and have been awarded contract by the Board of Public Works.

NEW YORK, N. Y.—Bids are asked by the Park Board, until 3 p. m., April 8, for furnishing and delivering 1,000 cu. yds. of broken stone of trap rock and 2,000 cu. yds. of screenings of trap rock (No. 1, 1909) for parks, Borough of the Bronx; and furnishing and delivering one 12-ton 3-wheel steam road roller for the Department of Parks, Borough of the Bronx.

ALBANY, N. Y.—Bids are asked by the Board of Contract and Supply, Albany, until 3 p. m., April 6, for the improvement of West Lawrence St., from Manning Boulevard to Kent St., and Kent St., from West Lawrence St. to Allen St., the work including excavating, filling and forming the streets, curbing and paving the carriageways with repressed vitrified paving blocks, laying walks of concrete and stoneware pipe sewers, etc.; also for laying vitrified pipe sewer in Centre St. Walter Melius is City Engr. Isidore Wachsman is Secy. Bd.

GENEVA, N. Y.—WHITMORE, RAUBER & VICINUS, of Rochester, N. Y., were awarded the contract on March 22 by the Board of Public Works for paving Canal, Elm and Washington Sts., at $44,207 for Metropolitan, $41,014 for Corning, and $45,595 for Mack brick.

FREEHOLD, N. J.—Bids are asked by the Board of Chosen Freeholders of Monmouth County, until 11 a. m., April 14, for a gravel road in Upper Freehold Township, 3.725 miles long. W. B. Conover is Dir.

TRENTON, N. J.—Bids will be received by the Board of Chosen Freeholders, W. Scott Taylor, Dir., until April 13, for the macadamizing, etc., of North Crosswicks Road, beginning at Trenton and Crosswicks Road and extending to Crosswicks bridge. Frank J. Eppele is County Engr.

CUMBERLAND, MD.—THOMAS S. KEAN, Cumberland, has been awarded contract for laying 2,183 sq. yds. of brick 4 ins. thick on an 8-in. stone foundation with 2-in. sand cushion, at $1.666. Other bidders were: Chris. Roeder, $1.65; Fred Perry, $1.65; Le Fevre & Edwards, $1.67.

The contract for curbing was let to the same contractor at $4.637.

BALTIMORE, MD.—P. E. SCHNEIDER & CO., 332 Law Bldg., Baltimore, have been awarded contract at $1.74 per sq. yd. for paving with sheet asphalt Remington and First Aves., between 29th St. and Cedar Ave., and 30th St., from Huntingdon to Remington Ave., at about $60,000.

Specifications have been approved for paving following streets with granite blocks: Aisquith St., from Lexington St. to Orleans St.; Fremont Ave., from Baltimore St. to Lexington St.; Fulton Ave., from Baltimore St. to Frederick Ave.; Perry St., from Light St. to Charles St.; Park Ave., from Lexington St. to Fayette St. B. T. Fendall is City Engr.

BALTIMORE, MD.—The Board of Awards on March 24 awarded paving contracts as follows: Fourth Ave., between Chestnut Ave. and Falls Road, bitulithic, WARREN BROS. & CO., 608 Fidelity Bldg., $19,783; Chestnut Ave., between Third and Fourth Aves., vitrified bricks, PATRICK REDDINGTON, $7,157; 29th St., between Huntingdon and Guilford Aves., sheet asphalt, P. E. SCHNEIDER & CO., Law Bldg., $26,008; Loudon Ave., between the old and new Frederick road, tarred macadam, P. FLANIGAN & SONS, 120 E. Lexington St., $5,840.

Specifications were approved for paving the following streets in the Annex: 14th St., between Clifton Ave. and Windsor Mill Road; Twelfth St., between North and Clifton Aves.; Harrison St., between Gorsuch and Carswell Aves.; Polk St., between Gorsuch and Carswell Aves.

Bids are asked by the Board of Awards until 11 a. m., April 7, for grading, curbing, guttering and paving with improved paving several streets. B. T. Fendall is City Engr.

WASHINGTON, D. C.—Bids will be received by the Commissioners of the District of Columbia, until noon, April 10, for grading 16th St. N. W., between Webster and Kennedy Sts.

BOYDTON, VA.—Bids will be received until April 12 by the city for the construction of about 13 miles of road. R. T. Gordon is Chn. Com.

ALBANY, GA.—The SOUTHERN CLAY MFG. CO., of Chattanooga, Tenn., has been awarded the contract by the city for furnishing 338,000 vitrified brick for improvement of Broad St., at about $7,200.

APALACHICOLA, FLA.—We are officially advised that the city will purchase on April 8 either a 6 or 8-ton tandem or a 10-ton 3-wheel roller—all adapted to driving machinery—also one road machine and one sprinkling wagon, all of the above either new or second hand machinery in good order. H. W. Morgan is City Engr.

DECATUR, ALA.—Bids will be received until 10 a. m., April 12, by the Court of County Commissioners for constructing 27½ miles of macadamized roads.

MONTGOMERY, ALA.—Bids are asked by the city until April 5 for paving sidewalks with hexagon tile or Schillinger pavement, together with all necessary granite curbing, etc., of Grady, Moulton, Oak and other streets, and paving with clay gravel roadway of Forest Ave., together with necessary granite curbing, sewerage, etc. Robert Tait is City Treas.

ST. BERNARD (Cincinnati post-office), OHIO.—MORAN & SPRINGMEIER, of Cincinnati, have been awarded contract for work on Murray Rd., including grading 6,000 cu. yds. at 15 cts. per cu. yd.; 2,200 cu. yds. broken stone, $2; 500 cu. yds. gravel, 85 cts.; 250 cu. yds. concrete, $5; 25,000 sq. yds. rolling, 3 cts.; 4,400 lin. ft. concrete curb and gutter, 72 cts.; 100 lin. ft. concrete walk, 5-ft. wide, 60 cts.; 1,000 lin. ft. 15-in. drain pipe, in place, 90 cts.; two catch basins, $30 each; one oval manhole, $30; two round manholes, $33 each; 4,400 lin. ft. 3-in. drain tile, in place, 3 cts. Total, $12,-

141. Other bids: Kirchner Construction Co., $12,193; B. Niehaus, $12,302; Edward Ryan, $12,357; John Kuebel & Bro., $12,492; Gordon Engineering Co., $12,502; John Frunke, $12,605; Scott & Walker, $12,897; Louis Drach Construction Co., $13,403; Sperry & Ritter, $13,278; Thomas Strack, $13,641; August Henkel, $13,785; J. O'Brien, $13,865; F. A. Lewin, $14,118; Allen Kissinger, $15,031. J. A. Stewart, Traction Bldg., Cincinnati, Engr.

COLUMBUS, OHIO.—Bids will be received until April 7 by the Board of Public Service, E. W. Hirsch, Secy., for improving portions of Central and Stanley Aves. and Kimball Place by paving with brick or block and Waldeck Ave. by paving with asphalt.

YOUNGSTOWN, OHIO.—Bids will be received by the Board of Public Service until April 2 for furnishing material and repaving a portion of Boardman St.

NAPOLEON, OHIO.—Bids are asked until 10 a. m., April 9, by F. J. Beck, County Audr., for constructing eight road improvements.

STRUTHERS, OHIO.—Bids are asked until noon, April 6, by L. S. Creed, Village Clk., for labor and material for the construction of sidewalks, gutters and intersections to be constructed in said village during the fiscal year, beginning Jan. 1, 1909, and ending Dec. 31, 1909.

SANDUSKY, OHIO.—The BUTLER STONE CO. has been awarded the contract by the city for furnishing crushed stone for macadamizing streets for the year.

A. G. O'DONNELL secured the contract for sandstone and cement sidewalks for the year 1909.

BYESVILLE, OHIO.—Bids will be received by Elmer E. Green, Village Clk., until April 15 for grading, curbing, draining and paving with vitrified brick or asphalt block several streets, in all about 15,898 sq. yds. C. M. Hoge is Engr., Central National Bank Bldg., Cambridge.

BARBERTON, OHIO.—PAUL & HENRY, Barberton, were awarded contracts on March 22 by the city for paving Hunsberger Ave. and Cornell St., at $21,617 for Metropolitan block.

JEFFERSON, OHIO.—We are officially advised that bids were received as follows on March 22 by the county for constructing a tar macadam road in New Lyme under Rome Townships: Jenkins & Hines, Frankfort, Ind., $27,752; Nimms, Clements & Co., East Orwell, Ohio, $28,216; Buckeye Engineering Co., Norwalk, Ohio, $29,593; Wilson & Wiswell, Windsor, Ohio, $29,735; R. P. Burnett, Cleveland, Ohio, $29,834; Batchelor & Wingate, Conneaut, Ohio, $31,011; Waldeck, Ready & Young, Warren, Ohio, $32,263; Northwestern Construction Co., Franklin, Pa., $32,995; Uber & Breckenridge, Grove City, Pa., $40,661. J. S. Matson is County Engr.

FORT WAYNE, IND.—The Board of Public Works has ordered plans upon which to ask for bids for the letting of seven contracts for constructing cement sidewalks and five contracts for the construction of local sewers.

INDIANAPOLIS, IND.—Plans have been ordered on which bids will soon be asked for paving Vermont St., five blocks, and Dickson St., three blocks, with asphalt, and for the construction of local sewers in Georgia St., Arlington Ave. and Harlan St.

CLINTON, IND.—The town board will soon ask for bids for the paving of Vine St. with asphalt.

COVINGTON, IND.—Bids are asked by the Commissioners of Fountain County until 1.30 p. m., April 6, for the construction of three gravel roads in Troy Township, and one gravel road each in Richland and Wabash Townships. W. B. Gray is County Audr.

HARTFORD CITY, IND.—Bids are asked by the Commissioners of Blackford County until 2 p. m., May 3, for the construction of 5,552 ft. of macadam road in Washington Township. L. W. Daugherty is County Audr.

WASHINGTON, IND.—Bids are asked by the Commissioners of Daviess County until 2 p. m., April 6, for the construction of a gravel road in Daviess County. Thomas Nugent is County Audr.

DANVILLE, IND.—William H. Nichols, Audr. Hendricks County, will ask for bids as soon as plans are completed for the construction of a stone road in Clay Township and a stone road on the line between Middle and Union Townships.

DANVILLE, IND.—Bids are asked by the Commissioners of Hendricks County until 10 a. m., April 5, for the construction of 15,565 ft. of gravel road in Middle Township and 12,144½ ft. of gravel road in Center Township. W. H. Nichols is County Audr.

BLOOMINGTON, ILL.—All bids opened on March 11 by the Board of Local Improvement for brick paving have been rejected. The lowest bid was that of I. D. Lain, as follows: 14,504 sq. yds. brick pavement, on 4-in. Portland cement foundation fill, including 3,664 cu. yds. excavation, 2-in. sand cushion, $1.78 per sq. yd.; 7,944 lin. ft. 12 × 18-in. curb and gutter, 49 cts.; 18 c.-i. inlets, $10; 200 lin. ft. 12-in. vitrified sewer pipe, 45 cts.; 300 sq. yds. old pavement, relaid, 50 cts., and 200 lin. ft. stone curb, 10 cts. Total, $30,150. C. F. Fauntz is City Engr.

RIVER FOREST, ILL.—Bids are asked until 8 p. m., April 5, by the Board of Local Improvements for constructing asphalt on concrete base on Forest Ave. Estimated cost, $26,858, and for macadamizing Ashland Ave., estimated cost, $8,148.

ROCK ISLAND, ILL.—The TRI-CITY CONSTRUCTION CO., of Davenport, Iowa, has secured the contract for paving with brick a portion of Ninth St. at the following prices: 18,994 yds. of paving at $1.62 per sq. yd.; 10,392 ft. of curbing at 50 cts. per lin ft.; 6,120 yds. of grading at 40 cts. per cu. yd.; 70 ft. reinforced-concrete sewer at $14 per ft.; 1,345 ft. of 15-in. sewers at $1.25 per ft.; 19 catch basins at $40 each.

LA CROSSE, WIS.—Bids are asked until 2 p. m., April 17, by the Board of Public Works, H. J. Beckwith, Chn., for material and labor for paving with brick on Mormon Coulee Road, the work including 3,403 cu. yds. grading, 170 lin. ft. concrete headers, 3,633 lin. ft. cement curb and gutter, 6,643 sq. yds. brick paving, 300 sq. ft. concrete driveways laid on 6-in. concrete.

BEAVER DAM, WIS.—The following bids were opened on March 12 by the Board of Public Works for paving portions of Front, Center and S. Spring Sts., to consist of about 3,642 cu. yds. excavation, 4,034 lin. ft. concrete curb and gutter, 480 lin. ft. stone retaining curb, 815 lin. ft. Berea sandstone, 12,128 sq. yds. brick paving, 162 sq. yds. concrete sidewalk, 23 catch basins and 2,228 lin. ft. of 18 to 10-in. sewer pipe: F. Hildebrand, Milwaukee, $30,226; A. E. Rutledge & Co., Rockford, Ill., $29,913; Western Improvement Co., Racine, $30,158; R. R. Birdsall, Racine, $29,184; Thomas Szukalski, Milwaukee, $32,750; McCUGO CONSTRUCTION CO., Fond du Lac, $25,998 (awarded contract); G. H. Stanchfield, Fond du Lac, $28,586; C. F. Wiedmaier, Chicago, Ill., $29,041; Christian Johnson, Oshkosh, $33,711; J. Rasmussen & Sons, Oshkosh, $27,764; Edward Bartlett, Watertown, $26,594; Fielding & Shepley, St. Paul, Minn., $32,174; McGrath Construction Co., Green Bay, $29,893; Hackworthy Construction Co., Appleton, $31,140, and M. Tschirgi & Sons, Dubuque, Iowa, $31,508.

DES MOINES, IOWA.—Bids are asked until 10 a. m., April 5, by George E. Poorman, City Clk., for construction and reconstruction of cement and brick sidewalks and driveways.

ALBERT LEA, MINN.—Bids are asked by the city until April 15 for 9,236 sq. yds. of pavement, either brick or creosoted block. William Barneck is City Engr.

VIRGINIA, MINN.—Bids will be received until April 6 by Albert E. Bickford, City Clk., for furnishing and delivering a 10-ton steam road roller.

FARGO, N. DAK.—Bids are asked until 5 p. m., April 5, by N. C. Morgan, City Audr., for constructing sidewalks for ensuing year. Bids may be for any or all of the following: Tile, cement, concrete and tar concrete.

CANDO, N. DAK.—Bids are asked until 8 p. m., April 5, by H. D. Skinner, City Audr., for constructing cement and tile sidewalks.

ELLENDALE, N. DAK.—Bids are asked until 8 p. m., April 5, by John King, City Audr., for constructing cement sidewalks and crossings.

KANSAS CITY, MO.—Contracts for paving were awarded by the Board of Public Works on March 12, as follows: To PARKER WASHINGTON CO., Duncan Ave. St. Louis, Mo., for asphalt on Seventh, 25th and other streets, $1.70 to $1.80 per sq. yd.; CLEVELAND TRINIDAD PAVING CO., for paving 27th St. with asphalt, $2.12 per sq. yd.; M. MENSE, for paving Main St., from 12th to 13th St., with sandstone block, $3.10 and two alleys with concrete pavement at 73 cts. and 90 cts. per sq. yd.; J. E. WELSH, for paving with brick 14th St. and four other streets, $1.49 to $1.64 per sq. yd.; and WILLIAM HARTE for paving alleys with brick at $1.68 and $1.74, and with concrete at 73 cts. and $1.18 per sq. yd.

PAULS VALLEY, OKLA.—Contract for paving with brick 17,986 sq. yds. has been awarded to E. C. D'YARMETT, of Bartlesville, Okla., at $47,057. L. C. Hunter is City Engr.

SAN BERNARDINO, CAL.—The contract for sidewalking the Home Builders' Investment Company's addition No. 1, 3,200 ft., at Base Line and E Sts., has been let to A. ROBINSON.

WINNIPEG, MAN.—ALLOWAY & CHAMPION have been awarded contract to supply the city with from 2,500 to 3,500 tons of grade E Ebano asphalt at $28.09 per ton.

*SASKATOON, SASK.—Bids will be received by J. H. Trusdale, City Clk., until 5 p. m., April 20, for the following: One stone crusher of 10 to 20 tons per hr. capacity; one elevator complete; one set screens; one set of bins; one 10-ton road roller.

MANUFACTURING PLANTS.

Engineering News.)
(denotes that this work is advertised in*

BIDDEFORD, ME.—It is announced that the Pepperell Co. will expend $500,000 in enlarging and improving its plant the coming year. The addition will include a weave mill and a storehouse. The weave mill will be 385 ft. long and 135 ft. wide. It will be built alongside the canal. The cotton house, which is to replace the boarding block on Pearl St., will extend from Lincoln St. to Smith St. It will be about 75 ft. wide. The boarding block will be torn down. The company is installing a turbine engine in its plant, and other changes, including the installation of motors to run portions of the mills by electricity, but it will be six months before the work is completed.

LAWRENCE, MASS.—We are officially advised that the Brightwood Mfg. Co. of North Andover, Mass., manufacturers of worsted dress goods, has had plans and specifications prepared for a new mill, to be erected on the Lawrence side of the Shawshin River, just over the boundary line. The structure will be of brick, about 250 × 108 ft. inside, two stories in height, and embracing the most modern equipment. Contract for construction has been let to E. A. PEABODY & SON, 301 Essex St., Lawrence, Mass. The building will cost about $60,000. H. H. Smith is Arch., Lawrence.

WOONSOCKET, R. I.—In a few weeks the French Worsted Co., of Woonsocket, Aram J. Pothier, Acting Treas., will begin erection of an addition to its plant in the Hamlet Village section of this city, which will more than double the capacity of the plant and require double the number of hands at present employed. The company is controlled by Charles Tiberghiens & Sons, of Tourcoing, France. The increase will consist of an addition which will cost about $250,000, to be situated adjacent to the factory. The projected structure will be larger than the present building and will be along the same lines of mill architecture. The resident manager of the company is Telemon Glorieux. It is expected that the company will construct a storehouse near the two mill buildings soon.

SYRACUSE, N. Y.—The Syracuse, Lake Shore & Northern R. R. Co., of Syracuse, has engaged Sheaff & Jaastad, 88 Broad St., Boston, to prepare plans and specifications or a car house and for a machine and repair shop to be used by the Auburn & Syracuse, the Rochester, Syracuse & Eastern, the Syracuse & South Bay and the Syracuse, Lake Shore & Northern railroads. The building will have accommodations or 60 cars, and it is proposed to use it about exclusively or the Syracuse, Lake Shore & Northern R. R. Co. The building will be of fireproof construction, steel and concrete being the principal structural materials. William B. Rockwell is Gen. Mgr.

NEW YORK, N. Y.—Maynicke & Franke, Archs., 298 Fifth Ave., have filed for the Second Ave. R. R. Co. plans for rebuilding the car barn of the company on Second Ave., from 96th to 97th Sts., to comply with an order issued by the Buildings Department to repair the structure, which was recently found to be unsound in various parts. The old foundations and parts of the outer walls, which are in a sound condition, will be utilized in the reconstruction, and the building will be finished with an ornamental façade crowned by a crenelated parapet cornice. It will be three stories high. The alterations will cost $300,000.

KINGS PARK, N. Y.—The bids received by the Commission in Lunacy on March 24 for the construction of laundry at the Kings Park State Hospital, were: (1) To construct laundry, including prison material; (2) add for installing heating, plumbing and electric work: The H. Wales Lines Co., Meriden, Conn., (1) $47,242, (2) $4,900; Morris Kantrowitz, Albany, N. Y., (1) $44,000, (2) $4,800; Peter Keeler Building Co., Albany, N. Y., (1) $41,750, (2 $5,570; Charles H. Peckworth, New York, (1) $51,266, (2) $5,888; M. E. O'Connor, Brooklyn, N. Y., (1) $61,575, (2) $5,200; Richard E. Heningham, New York, (1) $49,560, (2) $4,860; James MacArthur, Brooklyn, N. Y., (1) $62,400, (2) $5,672; William Crawford, New York, (1) $67,236, (2) $5,249; Bliss & Griffiths, New York, (1) $40,372, (2 $5,428; Merrill-Ruckgaber Co., New York, (1) $43,200, (2) $7,254; P. J. Carlin Construction Co., New York, (1) $55,500, (2) $5,000; Ross-Bush Co., New York, (1) $41,352, (2) $4,594; William J. Moran, Inc., Brooklyn, N. Y., (1) $59,200, (2) $4,900; Penn Bridge Co., New Brighton, Pa., (1) $53,380, (2) $6,625. See item under Light and Power Plants.

BUFFALO, N. Y.—The Buffalo Copper & Brass Rolling Mill Co. will erect a brick and steel addition to its rolling mill on the Military Road, Arizona St. and New York Central R. R. The structure will be 178 × 144 ft., one story with steel trussed roof. Contract for structural steel, 175 tons, has been let to the BUFFALO STRUCTURAL STEEL CO. Jeremiah Howe is Gen. Mgr., Military Road and Arizona St.

We are officially advised that FRANK SWEET, 540 Glenwood Ave., Buffalo, has been awarded contract for erection of 1,000 tons of structural steel for the New York State Steel Co., Buffalo.

JERSEY CITY, N. J.—The Holbrook Mfg. Co., 470 Washington St., will begin the erection of a 7-story reinforced-concrete, fireproof soap factory, 55 × 108 ft.; a powerhouse, 28 × 72 ft., and a high tank, at 18th and Coles Sts., Jersey City. Plans were prepared by Van Vleck & Goldsmith, 111 Fifth Ave., New York. Walter Kidde, 90 West St., New York, is Consult. Mill Engr. The general contract has been awarded to C. W. SHELLY, 1123 Broadway, New York. The Holbrook Co. is composed of Franklin S., Stanton K., Robert N. and Gertrude M. Smith.

CANONSBURG, PA.—ALFRED TOMPKINS, constructing engineer, 718 House Bldg., Pittsburg, has secured a contract for the building of a foundation to accommodate a 40 × 72-in. mill engine, foundations for four new hot mills and for the building of sheet and bar heating furnaces in the plant of the Standard Tin Plate Co., Canonsburg, Pa.

LEBANON, PA.—A silk mill is to be erected in this city by Jansen & Pretzfeld, of Newark, N. J., owners of a mill in that city and of one at Pleasant Hill. The site is at Locust St. and First Ave. south of the Heights. The mill to be built will be 50 × 200 ft., and three stories high. The total annual output will be worth $350,000.

WEST MIDDLESEX, PA.—A contract amounting to about $12,000 has just been awarded to WILLIAM McINTYRE & SONS, of Sharon, Pa., by Pickands, Mather & Co., of Cleveland, for all the brick construction work at their furnace in West Middlesex, which is being rebuilt. McIntyre & Sons will line the stack, and bustle pipes, build the flues and also erect two new stoves. It will require several weeks to finish the work. All materials will be furnished by the owners.

PHILADELPHIA, PA.—A lot, 100 × 250 ft., has been conveyed to the Brown Knitting Co. by the Brown-Moore Hosiery Co., and a factory is to be erected.

Naschold & Knutzen have finished plans for a 4-story factory building, measuring 48 × 120 ft., to be built at 425 North Third St., for Oehrle Bros. & Co.

WILMINGTON, DEL.—Contracts have been awarded to A. S. REED & BRO. CO., of this city, for the construction of two shop buildings for the Harlan & Hollingsworth Corporation. The machinery to equip these shops will be supplied and installed by the PUSEY & JONES CO., also of this city. Each shop will be 220 × 170 ft. in size. Work will be started at once, and the buildings completed within four months. They will be used for the construction of steel passenger coaches.

DANVILLE, VA.—Lockwood, Green & Co., 93 Federal St., Boston, Mass., Archs. and Engrs., advise us that the proposed buildings of the Dan River Power & Mfg. Co., of Danville, Va., will be a mill building 550 ft. long, 150 ft. wide and three stories high, a cloth room building 220 ft. long, 75 ft. wide and 5 stories high. The construction will be slow burning mill construction with some steel beams used in one of the floors. The walls will be of brick. Bids probably will be received in about two weeks. The equipment will consist of cotton machinery, shafting, belting, sprinklers, humidifiers, heating apparatus and elevators.

WEST DURHAM, N. C.—The Erwin Cotton Mills Co., of Durham, N. C., has decided on West Durham as the location of its proposed $1,000,000 additional mill. The architects, F. P. Sheldon & Sons, of Providence, R. I., have been instructed to proceed with the preparation of plans and specifications. These will call for the erection of a main building 825 ft. long, containing a spinning room 200 ft. wide and a weaving room 300 ft. wide, one story high. This will be constructed of brick, standard mill construction. It will be augmented by cotton and cloth warehouses, several hundred operatives' cottages, etc. The power to drive the machinery will be electricity and it will probably be obtained from the wires of the Southern Power Co., of Charlotte, N. C. An equipment of 50,000 spindles and 1,500 looms is contemplated for the new plant. As soon as plans have been received the company will invite contractors to examine them with a view of bidding on the construction of the buildings. W. A. Erwin, Secy.-Treas. of the company, is in charge of the management and of building the new plant.

WEST POINT, GA.—The West Point Mfg. Co., West Point, Ga., is reported to be planning installations of additional machinery in its Shawmut Mill. It is reported that the present equipment of 25,000 spindles and 200 looms will be increased to 30,000 spindles and 300 looms.

MEMPHIS, TENN.—The Louisville Soap Co. has purchased the property of the Memphis Soap Co. and will remodel the plant of the latter here with a view to making it a branch of the company at Louisville. The local plant, when repaired and placed in first-class condition, will produce about 20,000 boxes of soap each month.

NILES, OHIO.—The DeForest Steel Co., of Niles, has awarded the RITER-CONLEY MFG. CO. a contract for one of the new steel mills to be erected at that place. The building will require a total of 800 tons of structural steel.

PIQUA, OHIO.—The Orr Felt & Blanket Co. have completed arrangements for the erection of a felt and blanket mill, work to begin at once. The plant will cover a city square. The factories already occupied will be abandoned for the new location, which must be completed by Jan. 1, 1910. All the power will be electrical, generated within the plant, each machine having an individual motor.

COLUMBUS, OHIO.—Bids are asked until 10 a. m., April 16, by Capt. H. J. Hirsch, Constr. Q. M., Columbus Barracks, for construction of a laundry building at this post, including plumbing, laundry equipment with boiler, motors, etc., electric wiring, and electric lighting fixtures.

LAPORT, IND.—The M. Rumley Co. is preparing to erect a large factory in this city to manufacture gasoline traction engines.

RICHMOND, IND.—It is reported that the F. & N. Lawnmower factory will be rebuilt as soon as debris is cleared and insurance adjusted. In addition to letting a contract for constructing a new building, new machinery will be purchased. John M. Lontz is Pres.

DECATUR, ILL.—The Illinois Traction System, Champaign, Ill., is about to commence the construction of a 48 × 300-ft. wood mill, brass foundry and other additional buildings adjoining the company's shops at Decatur. Considerable new wood-working machinery will be installed and improvements will be made in the main erecting and machine shop as the wood-working shop will be removed from that building.

FORT BAYARD, N. MEX.—On March 16, the following bids were received for installing steam laundry equipment at this post: Newell Bros., 218 West First St., Los Angeles, Cal., $10,354; Troy Laundry Machinery Co., Ltd., Chicago, Ill., $7,300; American Laundry Machinery Mfg. Co., New York, $7,605.

CASHMERE, WASH.—The Will Hayward Timber & Mining Co. will erect a sawmill and box factory at Cashmere to cost $60,000. Site has been secured.

ROSEVILLE, CAL.—The Southern Pacific Co. is to begin the construction of a car shop at Roseville soon, that will be 1,500 ft. long × 150 ft. wide. It will have more than three miles of track. The shop will be equipped with all sorts of machinery for wood and iron work. H. J. Small is Gen. Supt. of Motive Power, San Francisco.

BRANDON, MAN.—The CARTER-HALL-ALDINGER CO., of Winnipeg and Chicago, have the contract for a 24-stall round-house to be built here for the C. P. R.

WINNIPEG, MAN.—The plant and buildings of the Stuart Machinery Co., which were destroyed by fire, will be rebuilt at once on a larger scale.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—Items regarding irrigation, canal projects, etc., will be found under Water Supply—Irrigation.

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*CEMENT.—Honolulu, T. H.—See under U. S. Possessions.

TUNNELS, ETC.—New York, N. Y.—See item under Light and Power Plants.

TELEPHONE.—Cranbrook, B. C.—The Cranbrook Telephone Co. will string wires between Fernie, B. C., and Lethbridge, Alta.

DITCH.—Medicine Hat, Alta.—Contract for the construction of a 45-mile ditch to irrigate 400,000 acres of land here has been let to J. D. McARTHUR, Winnipeg, Man.

DITCH.—Frankfort, Ind.—Bids are asked by Wm. A. Robinson, Drainage Comr., until 2 p. m., April 10, for construction of the Oliver M. Stroup ditch.

PIER SHED.—Elizabeth, N. J.—Bids are asked until April 15 for constructing a steel pier shed 140 x 40 ft. W. H. Luster, Jr., is City Engr.

CEMENT.—Sacramento, Cal.—Bids are asked until noon, April 10, by N. Ellery, State Engr., for furnishing 60,000 to 100,000 bbls. of Portland cement.

TELEPHONE SYSTEM.—Wilcox, Sask.—Bids will be received by A. E. Hadley until noon, April 5, for the construction work and supply of materials for the Wilcox Telephone Co.'s proposed system.

TELEPHONE POLES.—Winnipeg, Man.—The Provincial Government has awarded a contract for the supply of 50,000 telephone poles to the MANITOBA CEDAR CO., Winnipeg, for use this year.

*PASS.—Wheeling, W. Va.—Bids are asked until 11 a. m., April 26, by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., for constructing 500 ft. of navigable pass for Dam No. 19, Ohio River.

*LOCK.—Vicksburg, Miss.—Bids are asked until noon, May 26, by Capt. Clarke S. Smith, Corps Engrs., U. S. A., for building Lock No. 6 in Ouachita River, near Roland Raft, Ark.

DAM.—Sault Ste. Marie, Mich.—Bids will be received by Lieut.-Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, until April 20 (extension of date from March 30) for constructing superstructure of a movable dam for St. Mary's Falls Canal, at Sault Ste. Marie.

GALVANIZED PIPE.—Greenville, Miss.—Bids will be received until April 5 by W. W. Miller, Clk. Bd. Supervs., for four carloads of galvanized pipe, from 8 to 36 ins. in diameter, for road purposes.

TELEPHONE SYSTEM.—Belle Plaine, Sask.—Bids will be received by John Poyser up to and including April 15 for the construction and supply of all material necessary for the erection of the Stoney Beach Telephone Co.'s proposed system.

TELEPHONE LINE.—Grey, Sask.—Bids will be received by Elmer Auld, of this town, until April 3, for the construction of the Grey-Milestone telephone line which involves the stringing of 72 miles of wire over the 24-mile line, 30 poles to the mile.

*TILE DITCHES.—Atkinson, Ill.—Bids are asked by the Commissioners of Drainage Union, District No. 1, of the towns of Atkinson and Alba, Henry County, Ill., until 2 p. m., April 17, for constructing 38,380 ft. of tile ditches. H. E. Reeves, Engr.

LEVEE.—Kansas City, Kan.—Bids will be received at the office of the Kaw Valley Drainage Board until noon, April 3, for about 165,350 cu. yds. of levee work, on left bank of Kaw River from Fifth St. to Southern Bridge.

DITCH.—Crown Point, Ind.—Bids will be received until April 3 for the proposed ditch work, to consist of about 304,000 cu. yds. excavation. Estimated cost, $27,000. J. B. Murphy is Engr.; William Cochran is Drainage Comr.

CREEK IMPROVEMENT.—Prophetstown, Ill.—Bids will be received until April 5 by the Drainage Commissioners of the Drainage District of Tampico, Prophetstown and Hume at the office of F. W. Sears, Engr., at Prophetstown, for deepening and widening Coon Creek, Lines Nos. 2 and 3, in said district, requiring the removal of about 110,000 yds. of material.

DITCH.—Harrisburg, Ill.—Bids will be received until April 8 by L. E. Coffee, Town Clk., for constructing a ditch known as the main outlet in Briar Creek, Union District, towns of Harrisburg and Independence, consisting of 65,979 cu. yds.

DRAINAGE DITCH.—Jeddo, Pa.—Bids are asked by G. B. Markle & Co., Jeddo, Pa., until 2 p. m., April 1, for the construction of about four miles of drainage ditch at Highland No. 6 colliery. The quantity of material to be moved is about 47,000 cu. yds., largely earth excavation.

CANAL.—Brownsville, Tex.—The Brownsville Land & Improvement Co. has given a contract for the construction of a canal to water what is known as the West Brownsville Addition, to the extent of about 3,000 acres, to J. E. ALLEN, of this city. The contract calls for the canal's completion within three months.

*CONCRETE RETAINING WALL.—Charleston, S. C.—Bids are asked until noon, May 3, by J. H. Dingle, City Engr., for constructing 4,000 ft., more or less, of concrete retaining wall at Charleston, S. C., and for filling in behind same (670,000 cu. yds., more or less) with material dredged from river.

CAPSTANS.—Washington, D. C.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., until 11 a. m., April 17, for furnishing and installing one electric capstan at the navy-yard, Philadelphia, and three at the navy-yard, Mare Island, Cal. Specifications are on file at office of Engineering News, New York.

MECHANICAL EQUIPMENT.—New York, N. Y.—Bids are asked until noon, April 16, by the Department of Docks and Ferries for furnishing all the labor and materials required for furnishing and installing mechanical and electrical equipment on Piers Nos. 53, 54, 56, 57, 58, 59, 60, 61 and 62, North River, between Bloomfield and West 22d Sts., on the Chelsea Section, in the Borough of Manhattan.

DITCH.—Vandalia, Ill.—Bids were received by the Commissioners of Grassy Lake Drainage District, H. W. Crumbaugh, Chn., on March 19 for excavating main ditch, about five miles in length, about 120,000 cu. yds., and the contract has been awarded to R. H. McWILLIAMS, of Mattoon, Ill., for $13,020. P. E. Fletcher, St. Elmo, Ill., is Engr.

CONTRACT PRICES.

[Where * precedes item under Contract Prices, the work was advertised in Engineering News.]

*PRESSURE TUNNEL.—New York, N. Y.—Bids were received by the Board of Water Supply on March 18 for Contract No. 47, for the construction of the Wallkill siphon, a deep pressure tunnel in rock, 14½ ft. inside diameter and about 23,400 ft. long, crossing under the valley of the Wallkill River, with six shafts from 350 to 480 ft. in depth, and adjacent grade tunnels, and stretches of plain concrete conduit known as cut-and-cover aqueduct, the work being located in the towns of New Paltz and Gardiner, Ulster County. Bids in detail were as follows. Contract was awarded to (A) the DEGNON CONTRACTING CO., 60 Wall St., at $3,982,726. Other bidders were: (B) John C. Rodgers & Co., 121 West 125th St.; (C) Mason & Hanger Co., Richmond, Ky.; (D) Booth & Flinn, Lt., 1942 Forbes St., Pittsburg; (E) Bradley Contracting Co., 1 Madison Ave., New York; (F) American Pipe & Construction Co., 112 North Broad St., Philadelphia; (G) Millard Construction Co., Pennsylvania Bldg., Philadelphia, and 2 Rector St., New York; (H) Buffalo Dredging Co., Morgan Bldg., Buffalo, N. Y.; (I) S. Pearson & Son, Inc., Long Island City, N. Y.:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
130 lin. ft. construction shafts in earth	$250.00	$300.00	$185.00	$300.00	$350.00	$300.00	$280.00	$200.00	$250.00
950 lin. ft. construction shafts in rock	275.00	350.00	245.00	300.00	363.00	350.00	300.00	250.00	350.00
130 lin. ft. refilling construction shafts	5.00	5.00	8.00	10.00	6.00	5.00	5.00	12.00	8.25
105 lin. ft. waterway and drainage shafts in earth	250.00	250.00	185.00	300.00	260.00	300.00	300.00	200.00	250.00
13,000 cu. yds. rock excavation in waterway and drainage shafts	15.00	20.00	200.00	15.00	15.00	15.00	14.00	15.00	15.00
253,000 cu. yds. excavation of pressure tunnel and drainage drift	6.00	5.90	6.10	6.30	6.34	6.00	6.00	6.50	6.40
500 sq. yds. additional trimming in shafts, pressure tunnel and drainage drift	4.00	3.00	5.50	3.00	4.00	5.00	5.00	10.00	7.00
1,220,000 lbs. furnishing structural steel roof support	.03	.03	.04	.03	.03	.04	.04	.04½	.07
1,220,000 lbs. erecting structural steel roof support	.01	.03	.02	.03	.01	.01	.02	.03	.01⅛
125 M. ft. B. M. temporary timbering in pressure tunnel and drainage drift	60.00	60.00	75.00	80.00	40.00	80.00	60.00	70.00	88.00
400,000 mil. ft. gals. pumping from shafts and pressure tunnel during construction	.15	.20	.10	.20	.10	.25	.22	.40	.37
25,750 lin. ft. drainage channels for shafts and pressure tunnel	1.50	.50	2.00	2.00	2.50	2.00	2.00	2.00	2.70
1,220 lin. ft. forms for lining of waterway shafts and outer lining of drainage shaft	6.00	8.00	8.00	7.00	7.00	8.00	8.00	10.00	5.45
360 lin. ft. forms for inner lining of drainage shaft	5.00	8.00	7.00	7.00	7.00	8.00	8.00	10.00	5.45
23,470 lin. ft. forms for lining of pressure tunnel and drainage drift	3.00	2.50	4.50	4.00	2.00	3.00	4.00	4.00	6.39
7,800 cu. yds. concrete masonry in shafts	7.00	12.00	8.00	12.00	7.00	8.00	9.00	9.00	5.68
100,000 cu. yds. concrete masonry in pressure tunnel and drainage drift	6.00	5.80	6.25	6.00	5.50	6.00	6.00	7.00	5.65
5,000 cu. yds. excess concrete msnry. in shafts, pressure tunnel and drainage drift	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
200 cu. yds. brick masonry in shafts, pressure tunnel and drainage drift	20.00	9.00	18.00	17.00	15.00	15.00	20.00	17.50	22.75
7,000 cu. yds. dry packing in pressure tunnel	2.50	2.50	2.50	3.00	2.00	3.00	2.80	3.00	2.84
17,500 sq. ft. drainage interlining in drainage shaft	.15	.25	.30	.30	.40	.30	.30	.30	.28
7,500 lbs. furnishing and erecting steel castings and special valves	.10	.10	.10	.12	.10	.12	.10	.10	.13½
8,500 lbs. bronze access door and frame	.60	.75	.90	.75	.75	1.00	.75	.75	.62
60,000 lbs. structural steel interlining in drainage drift and pressure tunnel	.06	.08	.08	.08	.06	.08	.08	.07½	.09
450 sq. ft. cutting channels for water stops	1.25	1.50	2.00	2.00	1.50	2.00	2.00	2.00	1.13
415 lin. ft. lead-lined, 16" cast-iron pipe and specials	24.00	20.00	25.00	30.00	30.00	20.00	30.00	30.00	23.00
2,500 lin. ft. drilling 1½" or smaller holes in rock or masonry	.50	.40	.40	.40	.50	.50	.50	.40	.45
2,500 lin. ft. drilling 1¾" to 2½" holes in rock or masonry	.60	.40	.50	.40	.50	.60	.50	.50	.57
40,000 lin. ft. steel pipe for grouting, &c, in shafts, pressure tunnel & drainage dr.	.20	.25	.30	.20	.20	.30	.30	.40	.28
Miscellaneous plant and equip. for grouting in pres. tunnel, &c. (lump sum)	5,000.00	2,500.00	5,000.00	5,000.00	2,500.00	5,000.00	4,000.00	5,000.00	5,680.00
10 high-pressure air-compressors for grouting	300.00	300.00	300.00	600.00	250.00	300.00	500.00	300.00	398.00
10 tank-grouting machines	250.00	300.00	300.00	250.00	250.00	250.00	300.00	200.00	497.00
50 grouting pads	60.00	70.00	100.00	70.00	50.00	70.00	70.00	70.00	78.00
7,000 making connections of tank-grouting machines to grout pipes in shafts, &c.	.60	1.00	1.00	.50	.50	1.00	1.00	1.50	.95
2,000 setting grouting pads in pressure tunnel and drainage drift	1.00	1.00	1.00	.50	1.00	1.00	1.00	1.00	1.13
3,700 tons sand for grout in shafts, pressure tunnel and drainage drift	1.50	1.00	1.75	1.60	1.00	2.00	2.00	2.00	2.44
5,000 cu. yds. mixing and placing grout in shafts, pressure tunnel & drainage drift	4.00	3.50	5.00	4.00	4.00	4.00	5.00	6.00	10.65
2 hydrostatic tests of pressure tunnel	3,000.00	20,000.00	5,000.00	5,000.00	5,000.00	7,000.00	5,000.00	5,000.00	5,680.00
79,000 cu. yds. removal of top-soil	.40	.15	.55	.35	.50	.75	.60	.54	.34
28,000 cu. yds. open-cut excavation, Sta. 788+50 to Sta. 814	.90	1.10	.80	1.00	1.00	1.00	1.20	1.06	1.36
85,000 cu. yds. open-cut excavation, Sta. 814 to Sta. 834	1.20	1.30	1.00	1.00	1.00	1.00	1.20	1.93	1.14
33,000 cu. yds. open-cut excavation, Sta. 834 to Sta. 865	1.10	1.15	.75	1.00	1.00	1.00	1.20	1.84	1.35
61,000 cu. yds. open-cut excavation, Sta. 865 to Sta. 905+10	.70	.94	.75	1.00	1.00	1.00	1.20	1.28	1.06
120,000 cu. yds. open-cut excavation, Sta. 910+70 to Sta. 990	.60	.75	.70	1.00	1.00	1.00	1.20	.98	.85
10,800 cu. yds. open-cut excavation, Sta. 990 to Sta. 1108	.70	.75	.70	1.00	1.00	1.50	1.20	1.00	.85
3,600 cu. yds. open-cut excavation, Sta. 1108 to Sta. 1228	.70	.70	.70	1.00	1.00	1.50	1.20	.60	.43
50,000 cu. yds. refilling and embanking, Sta. 788—50 to Sta. 814	.30	.25	.45	.35	.40	.35	.45	.35	.38
12,000 cu. yds. refilling and embanking, Sta. 814 to Sta. 834	.30	.25	.40	.35	.40	.35	.45	.71	.38
37,000 cu. yds. refilling and embanking, Sta. 834 to Sta. 865	.30	.25	.40	.35	.40	.35	.45	.50	.38
60,000 cu. yds. refilling and embanking, Sta. 865 to Sta. 905—10	.30	.25	.40	.35	.40	.35	.45	.35	.38
104,000 cu. yds. refilling and embanking, Sta. 910+70 to Sta. 990	.30	.25	.40	.35	.40	.35	.45	.35	.38
14,000 cu. yds. refilling and embanking, Sta. 990 to Sta. 1108	.30	.25	.45	.35	.40	.35	.45	.50	.38
11,000 cu. yds. refilling and embanking, Sta. 1108 to Sta. 1228	.30	.25	.50	.35	.40	.35	.45	.50	.38
59,000 cu. yds. surface dressing and grassing	.60	.60	.50	.40	.60	.40	1.00	.60	.61
94,400 cu. yds. concrete masonry for equeduct in open cut and on embankment	5.50	4.90	6.00	4.50	5.75	5.50	6.00	7.00	7.10
6,100 cu. yds. concrete masonry for culverts, chambers, etc	6.00	6.00	7.00	5.00	8.00	8.00	8.00	7.50	8.40
300 cu. yds. reinforced concrete not in tunnel	8.00	8.00	11.50	10.00	6.00	10.00	12.00	10.00	10.50
250 cu. yds. stone masonry facing	15.00	10.00	12.50	10.00	25.00	20.00	20.00	16.00	22.75
2,975 cu. yds. dry rubble masonry and paving	2.50	4.00	4.00	4.00	3.00	3.00	3.50	3.00	7.52
100 cu. yds. rubble masonry and paving in mortar	3.50	4.50	5.00	5.00	5.00	5.00	4.50	4.00	8.23
1,750 cu. yds. surfacing permanent access roads	2.00	1.00	2.75	4.00	3.00	3.00	3.00	3.00	2.84
400 cu. yds. crushed stone and gravel	1.50	2.00	2.75	3.00	2.00	2.50	2.50	2.00	3.20
7 sluice-gates	90.00	100.00	100.00	100.00	75.00	100.00	100.00	100.00	113.00
24 tons cast-iron pipe and special castings	75.00	100.00	100.00	80.00	100.00	100.00	90.00	100.00	108.00
1,500 lin. ft. vitrified pipe	1.00	1.00	.70	.60	1.00	1.00	1.00	1.50	.85
140 M. ft. B. M. timber and lumber	60.00	50.00	50.00	60.00	40.00	50.00	60.00	60.00	68.00
9 testing portions of aqueduct	500.00	500.00	900.00	500.00	1,000.00	750.00	1,000.00	900.00	710.00
1,150 lin. ft. testing portion of aqueduct exceeding 200 ft. in length	1.00	2.50	2.50	5.00	2.00	4.00	3.00	4.50	1.42
45,500 cu. yds. rock excavation in grade tunnel	5.00	5.00	4.50	5.00	6.34	4.75	5.40	6.00	5.37
500 sq. yds. additional trimming in grade tunnels in rock	1.50	3.00	4.50	2.00	4.00	5.00	5.00	8.00	7.10
100 cu. yds. earth excavation in grade tunnels	6.00	5.00	4.50	4.00	4.00	4.50	5.00	8.00	4.26
100 cu. yds. enlargement of grade tunnel section in earth	8.00	3.00	13.00	10.00	3.00	4.50	5.00	15.00	9.47
125 M. ft. B. M. permanent timbering in grade tunnels	60.00	70.00	60.00	80.00	20.00	70.00	60.00	60.00	97.50
50 M. ft. B. M. temporary timbering in grade tunnels	60.00	50.00	50.00	80.00	20.00	70.00	60.00	60.00	88.00
4,010 lin. ft. grade tunnel drainage	.50	.15	1.00	2.00	1.00	2.00	1.20	1.50	2.70
4,010 lin. ft. forms for masonry lining in grade tunnel	2.50	2.50	3.00	4.00	2.50	8.00	4.00	3.50	7.38
12,100 cu. yds. concrete masonry in grade tunnels	5.50	5.75	5.75	4.75	5.50	6.00	6.00	6.50	5.00
800 cu. yds. excess concrete masonry in grade tunnels	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
200 cu. yds. brick masonry in grade tunnels	10.00	7.00	20.00	17.00	15.00	15.00	20.00	17.50	22.75
2,500 cu. yds. dry packing in grade tunnels	2.50	2.50	2.00	3.00	2.00	3.00	2.00	3.00	2.84
400 lin. ft. drilling holes in rock or masonry in grade tunnels	.50	.40	.40	.40	.50	.60	.50	.50	.57
1,500 lin. ft. steel pipe for grouting in grade tunnels	.25	.30	.30	.20	.20	.30	.30	.40	.28
342,000 bbls. Portland cement	1.45	1.50	1.45	1.50	1.60	1.60	1.70	1.60	2.13
850 cu. yds. grout of Port. cem. in grade tunnels & aque. in open cut & on emb.	4.00	4.50	6.00	4.00	4.00	10.00	6.00	6.00	11.06
250,000 lbs. sulphate of alumina for waterproofing concrete, mortar or grout	.02	.02½	.03	.02½	.01	.02	.03	.03	.01¾
46,000 lin. ft. stone boundary walls	.70	1.50	1.10	1.00	1.00	1.00	1.00	1.35	3.00
14,800 lin. ft. fences and guard-rails	.25	1.10	.25	.30	.50	.25	.40	.45	.65
180,000 lbs. steel for reinforcing concrete	.04	.04	.04	.04	.04	.03	.06	.04½	.05
7,100 lbs. miscellaneous cast iron, wrought iron and steel	.06	.10	.08	.06	.10	.10	.08	.06	.17
5,600 lbs. galvanizing	.03	.05	.03	.02	.01	.05	.02	.10	.03
8,900 lbs. bronze pipe and miscellaneous bronze	.55	.90	.80	.40	.75	.80	.75	.75	.80
80 lin. ft. reinforced concrete ladders	2.00	3.00	3.00	5.00	5.00	4.00	3.00	3.50	3.40
Moving Smiley House (lump sum)	1,500.00	2,500.00	1,750.00	2,000.00	1,500.00	2,000.00	1,500.00	2,000.00	500.00
Moving DuBois House (lump sum)	1,500.00	2,500.00	2,000.00	2,000.00	1,500.00	2,500.00	2,500.00	2,500.00	1,350.00
5 locker houses (each	1,500.00	2,000.00	1,000.00	1,000.00	1,500.00	1,750.00	1,500.00	1,400.00	1,350.00
Cleaning up (lump sum)	10,000.00	1.00	5,000.00	20,000.00	5,000.00	10,000.00	8,000.00	12,000.00	15,000.00
Total	$4,982,726	$5,190,177	$5,237,820	$5,247,766	$5,253,755	$5,286,070	$5,564,262	$5,965,696	$6,117,915

Time: 49 months. Bond required: $800,000.

U. S. POSSESSIONS AND CUBA.

*PORTLAND CEMENT—Hawaii.—Bids are asked by Major E. Eveleth Winslow, Corps Engrs., U. S. A., Honolulu, T. H., until noon, May 14, for furnishing 25,000 bbls. of Portland cement.

PIPE, ETC.—Panama.—Bids will be received until April 5 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., for pipe and fittings, sanitary fixtures, valves, cocks, lead pipe bender, etc., as per circular 498.

*HOSE, PACKING, ETC.—Panama.—Bids are asked until 10.30 a. m., April 26, by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Agt., Isthmian Canal Comn., for furnishing supplies during the fiscal year ending June 30, 1910, as follows: Hose, packing, rubber valves, gaskets, rubber belting, etc.

CRANES.—Panama.—Bids were received as follows on March 29 at the office of the Isthmian Canal Commission for furnishing two 20-ton locomotive coaling cranes, to have a maximum radius of 30 ft. and a minimum radius of not less than 12 ft., capacity of 30,000 to 42,000 lbs. at 12-ft. radius, 12,000 to 14,000 lbs. at 30-ft. radius, without outriggers. Crane to be mounted on a structural steel car body, carried on two four-wheel radial trucks. American Hoist & Derrick Co., St. Paul, Minn., $13,316, 14 days; Brown Hoisting Machinery Co., Cleveland, Ohio, $15,216, 42 days; Browning Engineering Co., Cleveland, Ohio, $13,878, 15 days shipment; Industrial Works, Bay City, Mich., $14,714, 45 days; Interstate Engineering Co., Bedford, Ohio, $16,500, 90 days; Cleveland Crane & Engineering Co., Cleveland, Ohio, $14,400, 150 days.

INDUSTRIAL NOTES.

THE STANDARD UNDERGROUND CABLE CO. is constructing a new mill at Perth Amboy, N. J., and will install a 750-B.HP. horizontal producer gas electric unit to furnish electric power to the new wire mill. Gas will be furnished from a plant of Westinghouse anthracite suction producers yielding gas of about 120 b. t. u. per cu. ft. A certain portion of the producer gas will also be used for heating and annealing operations in the wire mill. This engine will be the first of a new size developed at East Pittsburg suitable for direct connection to a 500-KW. generator with reasonable overload capacity. The engine and generator will be solid coupled, operating at a frequency of 60 cycles.

AMONG ORDERS RECENTLY RECEIVED by the Philadelphia plant of the Link-Belt Co. are: For Cuba, coal handling machinery for iron works, banana carrier, fueling barge equipments, automatic barrel elevator, mud conveyor; for Florida, elevators, conveyors and miscellaneous machinery for handling phosphate rock, belt conveyor for lumber company; for Massachusetts, coal handling machinery for large textile mill; for New Jersey, a coal conveyor; for New York, freight carrier for paper mill, two bucket carriers for crushed coke, elevating and conveying machinery for refuse; for Nova Scotia, coal handling machinery; for Pennsylvania, coal elevator and conveyor, two chip handling conveyors, elevator for crushed stone, car haul machinery; for Virginia, elevators, conveyors and miscellaneous machinery for handling phosphate rock.

THE ANNUAL MEETING of the stockholders of the Union Switch & Signal Co. took place March 9th in the office of the company, Westinghouse Building, Pittsburg. Owing to the absence of Mr. George Westinghouse in Europe, Col. H. G. Prout, Vice-President of the company, acted as chairman. The financial statement was read to the stockholders and an election for president and directors was held with the following results: George Westinghouse, Robert Pitcairn, William McConway, George C. Smith, Thomas Rodd, H. G. Prout, James J. Donnell, Directors. After the meeting a representative of the company stated that they have at the present time on hand at Swissvale orders for unfilled business amounting to $1,357,000. New contracts for block signaling and other railroad safety devices are now coming in more freely than at an time during the last twelve months.

For other Proposal Advertisements see pages 43, 44, 46, 48, of Advertisements and Construction News page 166.

MACADAM ROAD.

Gloucester County, N. J., March 30, 1909.

Widening and resurfacing one-half mile of the Westville and Glassboro Stone Road.

Sealed proposals will be received by the undersigned, at the office of William M. Carter, Engineer, No. 48 Cooper Street, Woodbury, N. J., on the 14th day of April next, at two o'clock in the afternoon, for the building of three-foot wide shoulders on each side of said road, beginning at the northerly end of said road at Westville and extending one-half mile southwardly, and resurfacing said half mile section, sixteen feet wide, with "Amlesite," in accordance with plans and specifications therefor on file at the office of the said William M. Carter, Engineer. Right is reserved to reject any or all bids.

THOMAS CUNNINGHAM,
ELWOOD USINGER,
HARRY W. JONES,
Stone Road Committee of the Board of Chosen Freeholders of Gloucester County.

WATER-WORKS TUNNEL.

New Haven, Conn.

Sealed proposals will be received by Eli Whitney, President of the New Haven Water Co., at his office, 100 Crown St., New Haven, Conn., until 12 M., Thursday, April 15th, 1909, for constructing about 8,400' of 6½' rock tunnel, for water supply.

Plans and specifications can be seen, and blank forms for proposal can be obtained at the office of the Engineer, A. B. Hill, Room 4, 100 Crown St., New Haven, Conn.

Bond on Proposal, $10,000.

Bond on Contract, $20,000.

A certified check for $10,000, payable to the New Haven Water Co., accompanying the bid will be accepted in place of a surety bond on the proposal.

The right to reject any or all proposals is reserved.

DAVID DAGGETT,
Secretary.

March 30th, 1909.

PAVING.

Cadiz, Ohio.

Sealed proposals will be received by the Clerk of the Village of Cadiz, Ohio, until 12 o'clock noon, Wednesday, May 5th, 1909, for 8,048 sq. yds., more or less, of street paving with brick.

Plans and specifications can be seen and forms of proposals obtained at the office of the Village Clerk, or the Engineers, The Riggs and Sherman Company, 613 The Nasby, Toledo, Ohio.

The Council reserves the right to reject any or all bids.

By order of the Council.

W. H. LUCAS,
Clerk.

SEWER.

North Andover, Mass.

Sealed proposals for constructing about two (2) miles of pipe sewer will be received by the Board of Public Works of North Andover, Massachusetts, at their office in North Andover, until 8 o'clock p. m. of Thursday, April 15, 1909. All proposals must be made on blank forms furnished by the Engineer and must be accompanied by a certified check made payable to the Town of North Andover for the sum of one thousand dollars ($1,000.00). Pipe, brick and castings will be furnished by the Town. Plans and profiles may be seen and form of proposal and specifications obtained at the office of the Eugineer, No. 62 Devonshire Street, Boston, Massachusetts. A deposit of two dollars ($2.00) will be required for each copy of proposal, specifications, etc. The Board reserves the right to reject any or all bids.

NATHANIEL STEVENS,
Chairman.
ERNEST W. BOWDITCH,
Engineer.

PROPOSALS FOR STEEL CULVERT FORMS.—Sealed proposals will be received at the office of the General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 2.30 p. m., April 10, 1909, at which time they will be opened in public for furnishing the above mentioned articles. Blanks and general information relating to this Circular (No. 501-A) may be obtained from this office. F. C. BOGGS, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Situations Wanted

Surveyors.

TRANSITMAN or rodman, technical, three years general construction. Go anywhere. Address "X. A. 13," Engineering News, New York. 13-1t

RODMAN, with 3 years' practical experience, desires position; 2 years' college; run instruments; go anywhere. Address "D. A. 6," Engineering News, New York. 13-1t

Bridge and Structural Engineers.

STRUCTURAL, 7½ years' experience in drawing room, 1½ years as squad foreman, 3 years as checker, also some experience in estimating and designing. Address "D. A. 13," Engineering News, New York. 13-2t

STRUCTURAL ENGINEER (32), graduate; nine years erecting, contracting, designing, estimating bridges, buildings, sheet metal, blast furnaces, ore, coal handling, etc. Executive and business ability. New York city preferred. Address "H. B. 13," Engineering News, New York. 13-tf

BRIDGE AND STRUCTURAL ENGINEER, graduate, age 30, now employed, wishes change. Six years' experience in designing, detailing and checking structural steel work and some reinforced concrete. Employed previously in contractor's office, railroad office and consulting engineer's force. Good draftsman. Location, Chicago. Address "G. B. 13," Engineering News, New York. 13-1t

Superintendents, Misc., etc.

POSITION as general foreman wanted by competent man, 35 years of age, having twelve years' practical experience as foreman on construction of water-works, sewers, reservoirs, dams and roads; best of references. Address "R. 2," Engineering News, New York. 13-2t

INSTRUMENTMAN, technical, 3½ years general surveys, construction and inspection. Location immaterial. Address "Z. A. 13," Engineering News, New York. 13-1t

FOREMAN wants position in charge concrete foundation, excavation, sewer, rock water-works, general construction; go anywhere. Address "C. C. 10," Engineering News, New York. 13-1t

Draftsmen.

DRAFTSMAN—Graduate C. E. of long experience as draftsman and estimator, including work on water-works, sewerage systems, crushing, grinding and conveying machinery, wire rope aerial tramways, piers, bulkheads and reinforced concrete construction. Desires permanent position in or near New York city. Address "E. A. 13," Engineering News, New York. 13-4t

DRAFTSMAN, fully experienced reinforced concrete building construction, structural engineering education. Address "S. A. 13," Engineering News, New York. 13-1t

Civil Engineers.

GRADUATE CIVIL ENGINEER, ten years' experience, 6 years railroad, maintenance and construction, 4 years real estate subdivision and city engineering, rapid and accurate calculator, good draftsman, desires position after April 1; New York or vicinity. References furnished. Address "F. B. 13," Engineering News, New York. 13-1t

GRADATE CIVIL ENGINEER, 2 years' experience general contracting work, 4 years tunneling, thoroughly experienced in soft and rock tunnel, also compressed air work, can handle men, good hustler, last position asst. superintendent, desires position. Address "K. 11," Engineering News, New York. 13-3t

GRADUATE C. E. (31), 6 years' general experience in hydraulic, railroad and municipal work, desires position in field or office. Address "R. L. A," 839 Foreich St., Lancaster, Pa. 13-2t

ASSISTANT RESIDENT ENGINEER, four years' experience in railroad work, construction and maintenance; also experienced in subdivision and municipal work. Good draftsman and instrumentman. Middle West preferred. Address "W. A. 13," Engineering News, New York. 13-1t

CIVIL ENGINEER, experienced in concrete and tunnel work, 6 years as resident engineer on railroad construction, one year with contractor erecting steel bridge; will accept $90 if located in a city. Address "HAMILTON," 2525 Montgomery Ave., Philadelphia. 13-2t

CIVIL ENGINEER, preliminary and construction, steam and electric railroads, special track work, land improvements, field and office, experienced and capable. Address "D. A. 10," Engineering News, New York. 13-1t

CIVIL ENGINEER, 2 years' experience in reinforced concrete construction and office management; hustler; best references; wil be open for engagement middle of April. Address "B. A. 13," Engineering News, New York. 13-1t

Situations Open

WANTED.—First-class designing draftsmen, familiar with mill construction work. When applying, state compensation expected and earliest date available. Address "R. A. 13," Engineering News, New York. 13-3t

WANTED—To purchase a machine capable of flattening plates of perforated metal having plain margins, the buckles arising from the stretching of the center of sheets where perforated. Address "METAL," c/o Morse Agency, 19 West 34th St., New York. 13-2t

WANTED—Several detailers and checkers for structural work. Apply to HAY FOUNDRY & IRON WORKS, Newark, N. J. 13-1t

WANTED—STRUCTURAL STEEL WORK DRAFTSMEN.—Pay from $2.80 to $5.52 per diem. A competitive examination will be held simultaneously at the Navy Yards, Boston, Mass.; Brooklyn, N. Y.; Philadelphia, Pa.; Washington, D. C.; Mare Island, Cal.; Puget Sound, Wash., and at Chicago, Ill., May 24 and 25, 1909, for the purpose of establishing an eligible register of structural steel work draftsmen. Applicants desiring to take the examination at any of the navy yards will address their applications to the commandants of such yards. Those wishing to take the examination at Chicago, Ill., will address their applications to the Secretary of the Navy, Washington, D. C. All applications must be delivered on or before May 12, 1909. 13-2t

WANTED.—Young man between 22 and 24 years old to run instrument near New York; must be bright, active and furnish good references; salary, $60. Address "K. B. 13," Engineering News, New York. 13-1t

Miscellaneous Wants

STRUCTURAL ENGINEER, A1 estimator and designer, wishes to [illegible] estimating on small commission basis [illegible] reliable concern. New York and [illegible]inity. Address "C. A. 13," Engineering News, New York. 13-2t

FOR SALE

FOR SALE

CONCRETE MIXERS

ALL STANDARD MAKES, ALL SIZES, New and Second-hand.

Write for General Catalog of Mixers, Block Machine, Power Tampers, Molds and Tools.

UNITED CEMENT MACHINERY MFG. CO., Plain City, Ohio.

ROAD BUILDING PLANT

FOR SALE

Consisting of Buffalo-Pitts Rollers, traction engines and cars; Monarch and Iroquois Rollers; Champion, Acme and Climax stone crushers; portable and stationary bins; dump wagons, carts, etc. All purchased new 1908. Good condition.

Stewart-Kerbaugh-Shanley Company
13-2t 100 James St., Syracuse, N. Y.

FOR SALE.

45 TON MARION STEAM SHOVEL

style "Improved A," all latest improvements, only two years old; has done very little work; now in best condition. Can be seen now at Coldwater, Ontario.

45 TON THEW SHOVEL STYLE 7

only two years old; in excellent shape, as good as new; has done very little work. Can be seen at Coldwater, Ontario, on Grand Trunk Ry., and Canadian Pacific Ry. Communicate with

Toronto Construction Co.
Norwich Union Building Toronto, Canada
13-2t

FOR SALE OR RENT.

1—Marion A 1½-yd. Steam Shovel.
2 Vulcan 9 × 14, 36" Dinkeys, 1905 and 1906.
16—4-yd. R. & McD. 1-way Dump Cars, 36", about 25 tons, 45-lb. rail, switches and ties.

Complete outfit, $7,000 cash, or

WOULD TAKE CONTRACT SUITABLE FOR ABOVE EQUIPMENT.

Address "F 13," Engineering News, New York City.

WANTED.

1—Second-Hand ¼ or ½-yd. Batch Concrete Mixer for street work. Gasoline power preferred.
1—Second-hand Road Machine.

PHILIPSE MANOR CO.,
c/o J. H. Wallace. North Tarrytown, N. Y.

FOR SALE.

One nearly complete

Civil Engineering Course in I. C. S.

or will sell library part of course separate. What am I offered? Address "D. 13," Engineering News, New York. 13-2t

Trap Rock Quarry

Fully Equipped Crushed Stone Plant FOR SALE

Capacity, 300 tons per day. More business than plant can care for. Railroad siding, within one hour of New York. Selling price, average 70 cts. yd. Can be produced f. o. b. cars less than 35 cts. yd.

Will consider either offer for full control or half interest. Supply unlimited. Further particulars given on interview. Address "I. B. 13," Engineering News, New York. 13-1t

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